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WEST Search History

DATE: Friday, September 26, 2003

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>			
L3	lipase same bacillus same pumilus	38	L3
<i>DB=USPT,JPAB,EPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>			
L2	lipase same bacillus same pumilus	80	L2
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>			
L1	lipase same bacillus same pumilus	118	L1

END OF SEARCH HISTORY

WEST[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 20 of 80 returned.** **1. Document ID: US 6623950 B1**

L2: Entry 1 of 80

File: USPT

Sep 23, 2003

US-PAT-NO: 6623950

DOCUMENT-IDENTIFIER: US 6623950 B1

TITLE: Modified enzymes having polymer conjugates

DATE-ISSUED: September 23, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
von der Osten; Claus	Lyngby			DK
Olsen; Arne Agerlin	Virum			DK
Roggen; Erwin Ludo	Lyngby			DK

US-CL-CURRENT: 435/220; 435/221, 435/252.3, 435/320.1, 435/471, 435/69.1, 510/320,
536/23.2

ABSTRACT:

The present invention relates to polypeptide-polymer conjugates having added and/or removed one or more attachment groups for coupling polymeric molecules on the surface of the polypeptide structure, a method for preparing polypeptide-polymer conjugates of the invention, the use of said conjugates for reducing the immunogenicity and allergenicity and compositions comprising said conjugate.

11 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw. Desc	Image										

 2. Document ID: US 6623948 B1

L2: Entry 2 of 80

File: USPT

Sep 23, 2003

US-PAT-NO: 6623948

DOCUMENT-IDENTIFIER: US 6623948 B1

TITLE: Nucleic acid sequences encoding alkaline alpha-amylases

DATE-ISSUED: September 23, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Outtrup; Helle	Vaerlose			DK
Hoeck; Lisbeth Hedegaard	Frorup			DK
Nielsen; Bjarne Ronfeldt	Virum			DK
Borchert; Torben Vedel	Copenhagen			DK
Nielsen; Vibeke Skovgaard	Bagsvaerd			DK
Bisg.ang.rd-Frantzen; Henrik	Bagsvaerd			DK
Svendsen; Allan	Birkerod			DK
Andersen; Carsten	Vaerlose			DK

US-CL-CURRENT: 435/202, 435/252.3, 435/254.11, 435/320.1, 435/325, 435/419, 536/23.1,
536/23.2, 536/23.7

ABSTRACT:

The present invention relates to isolated nucleic acid sequences encoding polypeptides having alpha-amylase activity [E.C. 3.2.1.1], which may be derived from *Bacillus*. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

13 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	EDOC
Draw Desc		Image								

3. Document ID: US 6617143 B1

L2: Entry 3 of 80

File: USPT

Sep 9, 2003

US-PAT-NO: 6617143

DOCUMENT-IDENTIFIER: US 6617143 B1

TITLE: Polypeptides having glucanotransferase activity and nucleic acids encoding same

DATE-ISSUED: September 9, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fukuyama; Shiro	Chiba			JP

US-CL-CURRENT: 435/193, 435/183, 435/252.3, 435/262, 435/263, 435/320.1, 435/69.2,
510/114, 536/23.2, 536/23.7

ABSTRACT:

The present invention relates to isolated polypeptides having glucanotransferase activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

21 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KOMC				

4. Document ID: US 6617026 B2

L2: Entry 4 of 80

File: USPT

Sep 9, 2003

US-PAT-NO: 6617026

DOCUMENT-IDENTIFIER: US 6617026 B2

TITLE: Particles containing active in visco-elastic liquids

DATE-ISSUED: September 9, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bach; Poul	Birker.o slashed.d			DK

US-CL-CURRENT: 428/402; 427/212, 427/213, 427/213.31, 428/402.2, 428/403, 428/407

ABSTRACT:

The present invention relates to a particle comprising an active dispersed in a visco-elastic liquid matrix having a .eta.' and a .eta.'' between 10.^{sup.3} to 10.^{sup.14} Pa measured in a cone-and-plate rheometer at 25.degree. C. and a sinusoidal frequencies .omega. of 1 Hz.

20 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KOMC				

5. Document ID: US 6608018 B1

L2: Entry 5 of 80

File: USPT

Aug 19, 2003

US-PAT-NO: 6608018

DOCUMENT-IDENTIFIER: US 6608018 B1

TITLE: Polypeptides having branching enzyme activity and nucleic acids encoding same

DATE-ISSUED: August 19, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shinohara; Mari L.	Brookline	MA		

US-CL-CURRENT: 510/392; 435/193

ABSTRACT:

The present invention relates to isolated polypeptides having branching enzyme activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

18 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

6. Document ID: US 6605458 B1

L2: Entry 6 of 80

File: USPT

Aug 12, 2003

US-PAT-NO: 6605458

DOCUMENT-IDENTIFIER: US 6605458 B1

TITLE: Protease variants and compositions

DATE-ISSUED: August 12, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hansen; Peter Kamp	Lejre			DK
Bauditz; Peter	K.o slashed.benhaven			DK
Mikkelsen; Frank	Valby			DK

US-CL-CURRENT: 435/220; 435/221, 435/222, 435/252.3, 435/320.1, 435/471, 435/69.1,
510/350, 536/23.2

ABSTRACT:

A protease subtilase enzyme, characterized by an insertion in at least one active site loop. The enzymes exhibit improved wash performance in a detergent in comparison to its parent enzyme if it is a subtilase variant.

77 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

7. Document ID: US 6592867 B2

L2: Entry 7 of 80

File: USPT

Jul 15, 2003

US-PAT-NO: 6592867

DOCUMENT-IDENTIFIER: US 6592867 B2

TITLE: Antimicrobial composition containing an oxidoreductase and an enhancer of the N-hydroxyanilide-type

DATE-ISSUED: July 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Johansen; Charlotte	Holte			DK
Deussen; Heinz-Josef	Soeborg			DK

US-CL-CURRENT: 424/94.4; 435/189, 435/190, 435/191, 435/192, 435/262

ABSTRACT:

The present invention relates to an enzymatic composition capable of killing or inhibiting microbial cells or micro-organisms, e.g. in laundry, on hard surfaces, in water systems, on skin, on teeth or on mucous membranes. The present invention also relates to the use of said enzymatic composition for preserving food products, cosmetics, paints, coatings, etc.

16 Claims, 3 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KIMC
Draw. Desc	Image									

8. Document ID: US 6582606 B2

L2: Entry 8 of 80

File: USPT

Jun 24, 2003

US-PAT-NO: 6582606

DOCUMENT-IDENTIFIER: US 6582606 B2

TITLE: Microfiltration using activated carbon

DATE-ISSUED: June 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Laustsen; Mads Aage	Lyngby	DK	
Nielsen; S.o slashed.ren Bo	V.ae butted.rl.o slashed.se	DK	
Jakobsen; Sune	V.ae butted.rl.o slashed.se	DK	
Hansen; Kim Uhre	Kalundborg	DK	

US-CL-CURRENT: 210/639; 210/651, 210/652, 210/774, 435/183, 530/412

ABSTRACT:

A microfiltration process of a fermentation-derived product comprising adding activated carbon to a solution of the fermentation-derived product prior to or during the microfiltration process at a microfiltration process temperature of from 25.degree. C. to 65.degree. C.

15 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KIMC
Draw. Desc	Image									

9. Document ID: US 6562585 B1

L2: Entry 9 of 80

File: USPT

May 13, 2003

US-PAT-NO: 6562585

DOCUMENT-IDENTIFIER: US 6562585 B1

TITLE: Beneficial bacterial preparation and method

DATE-ISSUED: May 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hiatt; William N.	Long Beach	CA	90807	

US-CL-CURRENT: 435/42

ABSTRACT:

A method and mixture for denitrifying aerobic bacterial compositions and for aerobic methods for biological treatment of aqueous systems polluted by nitrogen waste products.

A mixture of and limited to bacillus bacteria are added to the treatment subject.

Optionally enzymes can be added to the mixture.

Optionally a particulate carbon ingredient can be placed into the treatment subject.

Optionally a living tissue ingredient can be used.

5 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

10. Document ID: US 6558939 B1

L2: Entry 10 of 80

File: USPT

May 6, 2003

US-PAT-NO: 6558939

DOCUMENT-IDENTIFIER: US 6558939 B1

TITLE: Proteases and variants thereof

DATE-ISSUED: May 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
N.o slashed.rregaard-Madsen; Mads	Odense			DK
.O slashed. stergaard; Peter Rahbek	Virum			DK
Christensen; Claus Bo V.o slashed.ge	Snekkersten			DK
Lassen; S.o slashed.ren Flensted	K.o slashed.benhavn			DK

US-CL-CURRENT: 435/222; 435/252.3, 435/320.1, 435/471, 435/69.1, 510/350, 536/23.2

ABSTRACT:

Novel isolated proteases of the RP-II type and variants of RP-II proteases exhibiting improved properties in comparison to the parent RP-II protease, DNA constructs and vectors coding for the expression of said proteases and variants, host cells capable of expressing the proteases and variants from the DNA constructs, as well as a method of producing them by cultivating said host cells. The proteases may advantageously be used as constituents in detergent compositions and additives, optionally in combination with

other enzymes such as proteases, lipases, cellulases, amylase, peroxidases or oxidases.

27 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image									KMC

11. Document ID: US 6558938 B1

L2: Entry 11 of 80

File: USPT

May 6, 2003

US-PAT-NO: 6558938
DOCUMENT-IDENTIFIER: US 6558938 B1

TITLE: Protease variants and compositions

DATE-ISSUED: May 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hansen; Peter Kamp	Lejre			DK
Bauditz; Peter	Soborg			DK
Mikkelsen; Frank	Valby			DK
Andersen; Kim Vilbour	Copenhagen			DK

US-CL-CURRENT: 435/221; 435/252.31, 435/320.1, 435/471, 435/69.1, 510/306, 536/23.2

ABSTRACT:

Enzymes produced by mutating the genes for a number of subtilases and expressing the mutated genes in suitable hosts are presented.

The enzymes exhibit improved wash performance in any detergent in comparison to their wild type parent enzymes.

20 Claims, 1 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image									KMC

12. Document ID: US 6555355 B1

L2: Entry 12 of 80

File: USPT

Apr 29, 2003

US-PAT-NO: 6555355
DOCUMENT-IDENTIFIER: US 6555355 B1

TITLE: Protease variants and compositions

DATE-ISSUED: April 29, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hansen; Peter Kamp	Lejre			DK
Bauditz; Peter	S.o slashed.borg			DK
Mikkelsen; Frank	Valby			DK
Andersen; Kim Vilbour	Copenhagen			DK

US-CL-CURRENT: 435/221; 435/252.31, 435/320.1, 435/471, 435/69.1, 510/306, 536/23.2

ABSTRACT:

Enzymes produced by mutating the genes for a number of subtilases and expressing the mutated genes in suitable hosts are presented.

The enzymes exhibit improved wash performance in any detergent in comparison to their wild type parent enzymes.

20 Claims, 2 Drawing figures
 Exemplary Claim Number: 1
 Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

13. Document ID: US 6548278 B1

L2: Entry 13 of 80

File: USPT

Apr 15, 2003

US-PAT-NO: 6548278

DOCUMENT-IDENTIFIER: US 6548278 B1

TITLE: Enzymatic hydrolysis of cyclic oligomers

DATE-ISSUED: April 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Riegels; Martin	Leichlingen			DE
Koch; Rainhard	Koln			DE
Pedersen; Lars Saaby	Farum			DK
Lund; Henrik	Raleigh	NC		

US-CL-CURRENT: 435/135; 435/134, 435/136, 435/145, 435/196

ABSTRACT:

The present invention relates to a process for enzymatic hydrolysis of cyclic oligomers of poly(ethylene terephthalate), which process comprises subjecting the cyclic oligomer to the action of one or more lipolytic and/or biopolyester hydrolytic enzyme(s).

10 Claims, 0 Drawing figures
 Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

□ 14. Document ID: US 6544297 B1

L2: Entry 14 of 80

File: USPT

Apr 8, 2003

US-PAT-NO: 6544297

DOCUMENT-IDENTIFIER: US 6544297 B1

TITLE: Single-bath biopreparation and dyeing of textiles

DATE-ISSUED: April 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Liu; Jiyin	Raleigh	NC		
Condon; Brian	Wake Forest	NC		
Showmaker, III; Harry Lee	Raleigh	NC		

US-CL-CURRENT: 8/401; 8/111, 8/139

ABSTRACT:

The present invention provides methods for single-bath biopreparation and dyeing of cellulosic fibers, which are carried out by contacting the fibers simultaneously or sequentially with a bioscouring enzyme, preferably pectinase, protease, and/or lipase, and a dyeing system, under conditions that do not require emptying the bath or rinsing the fabric between biopreparation and dyeing steps.

25 Claims, 2 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KINIC
Drawn Desc	Image									

□ 15. Document ID: US 6528298 B1

L2: Entry 15 of 80

File: USPT

Mar 4, 2003

US-PAT-NO: 6528298

DOCUMENT-IDENTIFIER: US 6528298 B1

TITLE: .alpha.-amylase mutants

DATE-ISSUED: March 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Svendsen; Allan	Birkerod			DK
Borchert; Torben Vedel	Copenhagen			DK
Bisgard-Frantzen; Henrik	Bagsvaerd			DK
Outtrup; Helle	Ballerup			DK
Nielsen; Bjarne Ronfeldt	Virum			DK
Nielsen; Vibeke Skovgaard	Bagsv.oe butted.rd			DK
Hedegaard; Lisbeth	Skodsborg			DK

US-CL-CURRENT: 435/202; 435/183, 435/200, 435/201, 435/252.3, 435/320.1, 435/69.1,
536/23.2, 536/23.7

ABSTRACT:

The invention relates to a novel Termamyl-like α -amylase, and Termamyl-like α -amylases comprising mutations in two, three, four, five or six regions/positions. The variants have increased thermostability at acidic pH and/or at low Ca^{2+} concentrations (relative to the parent). The invention also relates to a DNA construct comprising a DNA sequence encoding an α -amylase variant of the invention, a recombinant expression vector which carries a DNA construct of the invention, a cell which is transformed with a DNA construct of the invention, the use of an α -amylase variant of the invention for washing and/or dishwashing, textile desizing, starch liquefaction, a detergent additive comprising an α -amylase variant of the invention, a manual or automatic dishwashing detergent composition comprising an α -amylase variant of the invention, a method for generating a variant of a parent Termamyl-like α -amylase, which variant exhibits increased thermostability at acidic pH and/or at low Ca^{2+} concentrations (relative to the parent).

12 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMPC
Draw Desc Image										

16. Document ID: US 6524827 B2

L2: Entry 16 of 80

File: USPT

Feb 25, 2003

US-PAT-NO: 6524827

DOCUMENT-IDENTIFIER: US 6524827 B2

TITLE: 2,6- β -D-fructan hydrolase enzyme and processes for using the enzyme

DATE-ISSUED: February 25, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moller; Soren	Holte			DK
Johansen; Charlotte	Holte			DK
Schafer; Thomas	Farum			DK
Ostergaard; Peter Rahbek	Virum			DK
Hoeck; Lisbeth Hedegaard	Skodsborg			DK

US-CL-CURRENT: 435/74; 435/183, 435/252.3, 435/252.33, 435/320.1, 536/23.2

ABSTRACT:

The present invention relates to isolated polypeptides having polypeptide having 2,6- β -D-fructan hydrolase activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

16 Claims, 8 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMPC
Draw Desc Image										

□ 17. Document ID: US 6521434 B2

L2: Entry 17 of 80

File: USPT

Feb 18, 2003

US-PAT-NO: 6521434

DOCUMENT-IDENTIFIER: US 6521434 B2

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

DATE-ISSUED: February 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Danielsen; Steffen	Copenhagen			DK
Schneider; Palle	Ballerup			DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 435/911, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated nucleic acid sequences encoding polypeptides having haloperoxidase activity. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences.

17 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KM/C
Draw Desc	Image									

□ 18. Document ID: US 6511835 B1

L2: Entry 18 of 80

File: USPT

Jan 28, 2003

US-PAT-NO: 6511835

DOCUMENT-IDENTIFIER: US 6511835 B1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

DATE-ISSUED: January 28, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Danielsen; Steffen	Copenhagen			DK
Schneider; Palle	Lynge			DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 435/911, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated nucleic acid sequences encoding polypeptides having haloperoxidase activity. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences.

17 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KMC				

□ 19. Document ID: US 6509181 B1

L2: Entry 19 of 80

File: USPT

Jan 21, 2003

US-PAT-NO: 6509181

DOCUMENT-IDENTIFIER: US 6509181 B1

TITLE: Polypeptides having haloperoxide activity

DATE-ISSUED: January 21, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Danielsen; Steffen	Copenhagen			DK
Schneider; Palle	Lynge			DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 435/911, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated polypeptides having haloperoxidase activity. The invention also relates to methods for producing and using the polypeptides.

11 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KMC				

□ 20. Document ID: US 6506586 B2

L2: Entry 20 of 80

File: USPT

Jan 14, 2003

US-PAT-NO: 6506586

DOCUMENT-IDENTIFIER: US 6506586 B2

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

DATE-ISSUED: January 14, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schneider; Palle	Lynge			DK
Danielsen; Steffen	Copenhagen			DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 435/911, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated nucleic acid sequences encoding polypeptides having haloperoxidase activity. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences.

17 Claims, 0 Drawing figures
Exemplary Claim Number: 1

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L2: Entry 21 of 80

File: USPT

Jan 14, 2003

US-PAT-NO: 6506585

DOCUMENT-IDENTIFIER: US 6506585 B2

TITLE: Polypeptides having haloperoxidase activity

DATE-ISSUED: January 14, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Danielsen; Steffen	Copenhagen			DK
Schneider; Palle	Ballerup			DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 435/911, 530/350, 536/23.2

ABSTRACT:

30 The present invention relates to isolated polypeptides having haloperoxidase activity. The invention also relates to methods for producing and using the polypeptides

11 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw. Desc	Image	KOMC							

□ 22. Document ID: US 6503508 B2

L2: Entry 22 of 80

File: USPT

Jan 7, 2003

US-PAT-NO: 6503508

DOCUMENT-IDENTIFIER: US 6503508 B2

TITLE: Polypeptides having haloperoxidase activity

DATE-ISSUED: January 7, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schneider; Palle	Lynge			DK
Danielsen; Steffen	Copenhagen			DK

US-CL-CURRENT: 424/94.4; 422/28, 435/168, 435/192, 435/25, 435/252.3, 435/320.1,
435/69.1, 510/226, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated polypeptides having haloperoxidase activity. The invention also relates to methods for producing and using the polypeptides.

12 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

□ 23. Document ID: US 6500658 B1

L2: Entry 23 of 80

File: USPT

Dec 31, 2002

US-PAT-NO: 6500658

DOCUMENT-IDENTIFIER: US 6500658 B1

TITLE: Xyloglucanase from Malbranchea

DATE-ISSUED: December 31, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wu; Wenping	Beijing			CN
Schulein; Martin	Copenhagen O			DK
Kauppinen; Markus Sakari	Smorum			DK
Stringer; Mary Ann	Copenhagen O			DK

US-CL-CURRENT: 435/206; 435/183, 435/200, 435/209, 435/262, 435/263, 435/264, 435/69.1,
510/114

ABSTRACT:

An isolated or purified polypeptide having xyloglucanase activity which is obtained from a strain of the genus Malbranchea and has xyloglucanase activity in the pH range 4-11, measured at 50.degree. C.; and/or a molecular mass of 25.+-.10 kDa, as determined by SDS-PAGE; and/or an isoelectric point (pI) in the range 3-5; and/or an N-terminal sequence Ala-Asp-Phe-Cys-Gly-Gln-Xaa-Asp-Ser-Glu-Gln-Ser-Gly-Pro-Tyr-Ile-Val-Tyr-Asn-Asn-Leu is useful in industrial applications such as in laundry detergent compositions and for treatment of textiles.

16 Claims, 4 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

□ 24. Document ID: US 6500644 B1

L2: Entry 24 of 80

File: USPT

Dec 31, 2002

US-PAT-NO: 6500644

DOCUMENT-IDENTIFIER: US 6500644 B1

TITLE: Method for in vivo production of a mutant library in cells

DATE-ISSUED: December 31, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Borchert; Torben Vedel	Jyllinge			DK
Ehrlich; Stanislas Dusko	Paris			FR

US-CL-CURRENT: 435/69.1; 435/189, 435/193, 435/195, 435/252.33, 435/252.5, 435/254.3,
435/254.6, 435/254.7, 435/320.1, 435/325, 435/348, 435/455, 435/471, 435/476, 435/483,
435/484, 435/485, 435/486, 435/487, 435/488, 435/489, 435/91.4

ABSTRACT:

A method for in vivo production of a library in cells comprising a multitude of mutated genetic elements, wherein an error-prone polymerase is used in each ancestral cell to replicate all or a part of a genetic element independently of the host chromosomal replication machinery. The genetic element comprises i) an origin of replication from which replication is initiated, ii) optionally a genetic marker, e.g. a gene conferring resistance towards an antibiotic, iii) a gene encoding the polypeptide of interest. Also methods for the generation of a DNA sequence encoding a desired variant of a polypeptide of interest, and for the determination of such a DNA sequence are described.

19 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw. Desc	Image									

□ 25. Document ID: US 6495357 B1

L2: Entry 25 of 80

File: USPT

Dec 17, 2002

US-PAT-NO: 6495357

DOCUMENT-IDENTIFIER: US 6495357 B1

TITLE: Lipolytic enzymes

DATE-ISSUED: December 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fuglsang; Claus Crone	Nivaa			DK
Okkels; Jens Sigurd	Frederiksberg			DK
Petersen; Dorte Aaby	Birkerod			DK
Patkar; Shamkant Anant	Lyngby			DK
Thellersen; Marianne	Frederiksberg			DK
Svendsen; Allan	Birkeroed			DK
Borch; Kim	Copenhagen			DK
Royer; John C.	Davis	CA		DK
Kretzschmar; Titus	Vaerloese			DK
Halkier; Torben	Birkeroed			DK
Vind; Jesper	Lyngby			DK
Jorgensen; Steen Troels	Alleroed			DK

US-CL-CURRENT: 435/198; 435/195, 435/196, 435/197

ABSTRACT:

The present invention relates to a modified enzyme with lipolytic activity, a lipolytic enzyme capable of removing a substantial amount of fatty matter a one cycle wash, a DNA sequence encoding said enzymes, a vector comprising said DNA sequence, a host cell harbouring said DNA sequence or said vector, and a process for producing said enzymes with lipolytic activity.

63 Claims, 22 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 22

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KDDC
Draw Desc	Image									

26. Document ID: US 6416756 B1

L2: Entry 26 of 80

File: USPT

Jul 9, 2002

US-PAT-NO: 6416756

DOCUMENT-IDENTIFIER: US 6416756 B1

TITLE: Modified protease having 5 to 13 covalently coupled polymeric molecules for skin care

DATE-ISSUED: July 9, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Olsen; Arne Agerlin	Virum			DK
Prento; Annette	Kdbakken			DK

US-CL-CURRENT: 424/94.63; 424/401, 424/94.1, 424/94.4, 424/94.6, 424/94.64, 424/94.65, 424/94.66, 424/94.67, 435/177, 435/180, 435/181

ABSTRACT:

Modified enzymes are prepared for use in skin care products by covalently coupling to the enzymes from 4 to 70 polymeric molecules with or without a linker such as a triazine ring. Molecular weight of the polymeric molecules may be from 1 to 35 kDa and of the enzymes from 15 to 100 kDa. The number and weight of polymeric molecules coupled is balanced with the weight and/or surface area of the enzymes. Enzymes include proteases such as subtilisins, lipases and oxidoreductases such as laccases and superoxide dismutase, and polymeric molecules include polysaccharides such as dextran or pullulan and polyalkylene oxides such as polyethylene glycol. The polymeric molecules may be coupled to the enzymes at the N-terminal amino group and/or lysine residues, and preferably at a position more than 5 .ANG. from the active site of the enzymes. A preferred modified enzyme is a protease having from 5 to 13 coupled polymeric molecules. Skin care products containing the modified enzymes have improved stability and reduced allergenicity as compared to the products containing the unmodified enzymes.

17 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KDDC
Draw Desc	Image									

□ 27. Document ID: US 6410305 B1

L2: Entry 27 of 80

File: USPT

Jun 25, 2002

US-PAT-NO: 6410305

DOCUMENT-IDENTIFIER: US 6410305 B1

** See image for Certificate of Correction **

TITLE: Treatment of animal waste

DATE-ISSUED: June 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Miller; Guy W.	Minneapolis	MN		
Patterson; Gregory Scott	Hopkins	MN		

US-CL-CURRENT: 435/268; 210/611, 210/613, 424/76.5, 424/76.6, 426/2, 435/836, 435/838,
435/839, 435/842, 435/856

ABSTRACT:

A process and composition for treating an animal waste in a waste holding facility to reduce sulfides and enhance efficient degradation of large amounts of organic matter with reduced odor. The process includes administering a probiotic material capable of promoting organic digestion to an animal and maintaining a sulfide gas concentration of less than 10 ppm from a waste produced by the animal. Maintaining a low sulfide gas concentration can be done by adding an inoculum of sulfide-utilizing bacteria to the waste produced by the animal.

56 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image		K001C						

□ 28. Document ID: US 6410292 B1

L2: Entry 28 of 80

File: USPT

Jun 25, 2002

US-PAT-NO: 6410292

DOCUMENT-IDENTIFIER: US 6410292 B1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

DATE-ISSUED: June 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Danielsen; Steffen	Copenhagen			DK
Schneider; Palle	Ballerup			DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 510/226, 530/300, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated nucleic acid sequences encoding polypeptides having haloperoxidase activity. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences.

10 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

29. Document ID: US 6410291 B1

L2: Entry 29 of 80

File: USPT

Jun 25, 2002

US-PAT-NO: 6410291

DOCUMENT-IDENTIFIER: US 6410291 B1

TITLE: Polypeptides having haloperoxidase activity

DATE-ISSUED: June 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Danielsen; Steffen	Copenhagen			DK
Schneider; Palle	Ballerup			DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 510/226, 530/300, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated polypeptides having haloperoxidase activity. The invention also relates to methods for producing and using the polypeptides.

11 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

30. Document ID: US 6399561 B1

L2: Entry 30 of 80

File: USPT

Jun 4, 2002

US-PAT-NO: 6399561

DOCUMENT-IDENTIFIER: US 6399561 B1

TITLE: Methods and compositions for bleaching a dye in solution

DATE-ISSUED: June 4, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schneider; Palle	Ballerup			DK
Deussen; Heinz-Josef	Soborg			DK

US-CL-CURRENT: 510/392; 510/226, 510/276, 510/312, 510/320, 510/321, 510/374, 510/375,
510/393, 510/530, 8/101, 8/111, 8/401

ABSTRACT:

The present invention provides methods and compositions for bleaching a dye in solution comprising contacting, in an aqueous solution, the dye with a composition comprising a laccase and an enhancing agent of the formula: ##STR1##

in which A is: ##STR2##

and B is H, or C1-C4 unbranched alkyl wherein said alkyl may contain ether groups, and one, two, three, four of R2, R3, R4, R5 and R6 are H, NH2, COOH, SO3H, CN, CH3, COCH3, NO2, OCH3, NR7R8, COOR9, or NOH--CO--R10, wherein R7, R8, R9 and R10 are C1-C2 unbranched alkyl, and one, two, three, four or five of R2, R3, R4, R5 and R6 is NH2, COOH, SO3H, CN, CH3, COCH3, NO2, OCH3, NR7R8, COOR9, or NOH--CO--R10, wherein R7, R8, R9 and R10 are C1-C2 unbranched alkyl.

11 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								KMPC

31. Document ID: US 6361989 B1

L2: Entry 31 of 80

File: USPT

Mar 26, 2002

US-PAT-NO: 6361989

DOCUMENT-IDENTIFIER: US 6361989 B1

TITLE: .alpha.-amylase and .alpha.-amylase variants

DATE-ISSUED: March 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Svendsen; Allan	Birkerod			DK
Borchert; Torben Vedel	Copenhagen			DK
Bisgard-Frantzen; Henrik	Bagsvaerd			DK
Outtrup; Helle	Ballerup			DK
Nielsen; Bjarne Ronfeldt	Virum			DK
Nielsen; Vibeke Skovgaard	Bagsv.ae butted.rd			DK
Hedegaard; Lisbeth	Skodsborg			DK

US-CL-CURRENT: 435/202; 435/183, 435/200

ABSTRACT:

The invention relates to a novel Termamyl-like .alpha.-amylase, and Termamyl-like .alpha.-amylases comprising mutations in two, three, four, five or six regions/positions. The variants have increased thermostability at acidic pH and/or at low Ca.²⁺ concentrations (relative to the parent). The invention also relates to a DNA construct comprising a DNA sequence encoding an .alpha.-amylase variant of the invention, a recombinant expression vector which carries a DNA construct of the invention, a cell which is transformed with a DNA construct of the invention, the use of an .alpha.-amylase variant of the invention for washing and/or dishwashing, textile desizing, starch liquefaction, a detergent additive comprising an .alpha.-amylase variant of the invention, a manual or automatic dishwashing detergent composition comprising an .alpha.-amylase variant of the invention, a method for generating a variant of a parent Termamyl-like .alpha.-amylase, which variant exhibits increased thermostability at acidic pH and/or at low Ca.²⁺ concentrations (relative to the parent).

5 Claims, 9 Drawing figures

Exemplary Claim Number: 1
 Number of Drawing Sheets: 9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

32. Document ID: US 6350604 B1

L2: Entry 32 of 80

File: USPT

Feb 26, 2002

US-PAT-NO: 6350604

DOCUMENT-IDENTIFIER: US 6350604 B1

TITLE: Alkaline lipolytic enzyme

DATE-ISSUED: February 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Hirayama; Satoshi	Chiba		JP
Taira; Rikako	Chiba		JP
Borch; Kim	K.o slashed.benhavn K		DK
Sandal; Thomas	Herlev		DK
Halkier; Torben	Birker.o slashed.d		DK
Oxenb.o slashed.ll; Karen Margrethe	Charlottenlund		DK
Nielsen; Bjarne R.o slashed.nfeldt	Virum		DK

US-CL-CURRENT: 435/198; 435/195, 435/252.3, 435/320.1, 510/226, 530/350, 536/23.2,
536/23.74

ABSTRACT:

Lipolytic enzymes with high activity at alkaline pH in the absence of Ca.sup.++ can be obtained from filamentous fungi of the genera Gliocladium, Verticillium and Trichophaea and that the lipolytic enzymes are effective for improving the effect of detergents. The lipolytic enzymes have a good washing performance, as expressed by the hydrolysis of oil on textile swatches. The amino acid sequences of the lipolytic enzymes are highly homologous.

13 Claims, 8 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

33. Document ID: US 6323007 B1

L2: Entry 33 of 80

File: USPT

Nov 27, 2001

US-PAT-NO: 6323007

DOCUMENT-IDENTIFIER: US 6323007 B1

TITLE: 2,6-.beta.-D-fructan hydrolase enzyme and processes for using the enzyme

DATE-ISSUED: November 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moller; Soren	Holte			DK
Johansen; Charlotte	Holte			DK
Schafer; Thomas	Farum			DK
Ostergaard; Peter Rahbek	Virum			DK
Hoeck; Lisbeth Hedegaard	Skodsborg			DK

US-CL-CURRENT: 435/74; 435/200, 435/252.33, 435/262, 435/274, 435/320.1

ABSTRACT:

The present invention relates to isolated polypeptides having polypeptide having 2,6-.beta.-D-fructan hydrolase activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

10 Claims, 8 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

34. Document ID: US 6309871 B1

L2: Entry 34 of 80

File: USPT

Oct 30, 2001

US-PAT-NO: 6309871

DOCUMENT-IDENTIFIER: US 6309871 B1

TITLE: Polypeptides having alkaline .alpha.-amylase activity

DATE-ISSUED: October 30, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Outtrup; Helle	Vaerlose			DK
Borchert; Torben Vedel	Copenhagen			DK
Nielsen; Bjarne Ronfeldt	Virum			DK
Nielsen; Vibeke Skovgaard	Bagsv.ae butted.rd			DK
Hoeck; Lisbeth Hedegaard	Skodsborg			DK

US-CL-CURRENT: 435/202

ABSTRACT:

The present invention relates to isolated polypeptides having .alpha.-amylase activity and isolated nucleic acid sequences encoding the polypeptides, which may be derived from *Bacillus*. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

6 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KMC				

35. Document ID: US 6303752 B1

L2: Entry 35 of 80

File: USPT

Oct 16, 2001

US-PAT-NO: 6303752

DOCUMENT-IDENTIFIER: US 6303752 B1

TITLE: Polypeptides conjugated with polymers

DATE-ISSUED: October 16, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Olsen; Arne Agerlin	Virum			DK
Fatum; Tine Muxoll	Aller.o slashed.d			DK
Deussen; Heinz Josef	S.o slashed.borg			DK
Roggen; Erwin Ludo	Lyngby			DK

US-CL-CURRENT: 530/350; 435/189, 435/193, 435/221, 435/222, 530/402, 530/403

ABSTRACT:

The present invention relates to modified polypeptides with reduced respiratory allergenicity having polymeric molecules with a molecular weight from 100 up to 750 Da, coupled covalently to the parent polypeptide having a molecular weight from 5 to 100 kDa. The present invention also relates to industrial compositions comprising modified polypeptide with reduced respiratory allergenicity, skin care products, the use of modified polypeptides for reducing the allergenicity of industrial composition and products and finally a method for reducing the allergenicity of polypeptides.

32 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KMC				

36. Document ID: US 6300116 B1

L2: Entry 36 of 80

File: USPT

Oct 9, 2001

US-PAT-NO: 6300116

DOCUMENT-IDENTIFIER: US 6300116 B1

TITLE: Modified protease having improved autoproteolytic stability

DATE-ISSUED: October 9, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
von der Osten; Claus	Lyngby			DK
Halkier; Torben	Birkerod			DK
Andersen; Carsten	Vaerloese			DK
Bauditz; Peter	Copenhagen O			DK
Hansen; Peter Kamp	Lejre			DK

US-CL-CURRENT: 435/220; 435/221, 435/222, 435/253.1, 435/320.1, 435/471, 435/476,
435/69.1, 510/300, 510/320, 536/23.2

ABSTRACT:

The present invention relates to enzymes produced by mutating the genes for a number of subtilases and expressing the mutated genes in suitable hosts are presented. The enzymes exhibit improved autoproteolytic stability in comparison to their wild type parent enzymes.

33 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

37. Document ID: US 6287585 B1

L2: Entry 37 of 80

File: USPT

Sep 11, 2001

US-PAT-NO: 6287585

DOCUMENT-IDENTIFIER: US 6287585 B1

TITLE: Methods for laundry using polycations and enzymes

DATE-ISSUED: September 11, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Johansen; Charlotte	Holte			DK

US-CL-CURRENT: 424/405; 510/276, 510/300, 510/360, 510/530

ABSTRACT:

The present invention provides a method of killing or inhibiting the growth of microbial cells present on laundry, comprising contacting the cells with a composition comprising a poly-cationic compound, preferably a polyamino acid, a polyvinylamine, a copolymer prepared from vinylamine and one or more carboxylic acid anhydrides, e.g. a polymer comprising 0.1-100 mol % vinyl amine or ethyleneimine units, 0-99.9 mol % units of at least one monomer selected from N-vinylcarboxamides of the formula I ##STR1##

wherein R.¹ and R.² are hydrogen or C.₂-C.₆-alkyl;

vinyl formate, vinyl acetate, vinyl propionate, vinyl alcohol, C.₂-C.₆-alkyl vinyl ether, mono ethylenic unsaturated C.₂-C.₈-carboxylic acid, and esters, nitrites, amides and anhydrides thereof, N-vinylurea, N-imidazoles and N-vinyl imidazolines; and

0-5 mol % units of monomers having at least two unsaturated ethylenic double bonds;

and one or more enzymes, preferably glycanases, muranases, oxidoreductases, glucanases, proteases, amylases, lipases, pectinases and xylanases.

8 Claims, 2 Drawing figures
 Exemplary Claim Number: 1
 Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

38. Document ID: US 6268197 B1

L2: Entry 38 of 80

File: USPT

Jul 31, 2001

US-PAT-NO: 6268197

DOCUMENT-IDENTIFIER: US 6268197 B1

TITLE: Xyloglucan-specific alkaline xyloglucanase from bacillus

DATE-ISSUED: July 31, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schulein; Martin	Copenhagen			DK
Outtrup; Helle	Ballerup			DK
Jorgensen; Per Lina	Copenhagen			DK
Bjornvad; Mads Eskelund	Frederiksberg			DK

US-CL-CURRENT: 435/209; 435/263, 510/320, 510/392, 510/530

ABSTRACT:

A xyloglucanase having a relative xyloglucanase activity of at least 50% at pH 7 and either no or an insignificant cellulolytic activity is obtainable e.g. from a strain of Bacillus. A xyloglucanase comprising an amino acid sequence as shown in positions 30-261 of SEQ ID NO:2 or homologues may be derived from eg Bacillus licheniformis, ATCC 14580, and may be encoded by polynucleotide molecules comprising a nucleotide sequence as shown in SEQ ID NO:1 from nucleotide 88 to nucleotide 783; and a xyloglucanase comprising an amino acid sequence as shown in positions 1-537 of SEQ ID NO:4 or homologues may be derived from eg B. agaradhaerens, NCIMB 40482, and may be encoded by polynucleotide molecules comprising a nucleotide sequence as shown in SEQ ID NO:3 from nucleotide 1 to nucleotide 1611. The xyloglucanases are useful e.g. in cleaning compositions and for treatment of cellulosic fibres.

12 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

39. Document ID: US 6258590 B1

L2: Entry 39 of 80

File: USPT

Jul 10, 2001

US-PAT-NO: 6258590

DOCUMENT-IDENTIFIER: US 6258590 B1

TITLE: Biopreparation of textiles at high temperatures

DATE-ISSUED: July 10, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Lange; Niels Erik Krebs	Raleigh	NC	
Kongsbak; Lars	Holte		DK
Shulein; Martin	Copenhagen .O slashed.		DK
Bj.o slashed.rnvad; Mads Eskelund	Frederiksberg		DK
Husain; Philip Anwar	Wake Forest	NC	

US-CL-CURRENT: 435/263; 435/232, 8/137, 8/139

ABSTRACT:

The present invention provides methods for high-temperature biopreparation of cellulosic fibers by contacting the fibers with pectin-degrading enzymes, preferably thermostable, alkaline, divalent cation-independent pectate lyases, under conditions compatible with scouring and bleaching technologies.

7 Claims, 2 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc Image										

 40. Document ID: US 6255451 B1

L2: Entry 40 of 80

File: USPT

Jul 3, 2001

US-PAT-NO: 6255451

DOCUMENT-IDENTIFIER: US 6255451 B1

TITLE: Degradation of biologically degradable polymers using enzymes

DATE-ISSUED: July 3, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Koch; Rainhard	Koln			DE
Lund; Henrik	Kopenhagen			DK

US-CL-CURRENT: 528/490; 435/18, 435/19, 435/252.1, 435/254.1, 435/255.1, 435/262,
435/29

ABSTRACT:

This invention relates to the complete degradation by enzymes of moldings, sheet-like products, coatings, adhesives or foams made of biodegradable polymers. The invention relates in particular to the enzymatic degradation of polyester amides, and of polyester urethanes which contain urea groups.

7 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc Image										

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80

Display Format: [Previous Page](#) [Next Page](#)

WEST[Generate Collection](#)[Print](#)**Search Results - Record(s) 41 through 60 of 80 returned.** **41. Document ID: US 6245901 B1**

L2: Entry 41 of 80

File: USPT

Jun 12, 2001

US-PAT-NO: 6245901

DOCUMENT-IDENTIFIER: US 6245901 B1

TITLE: Modified polypeptide

DATE-ISSUED: June 12, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
von der Osten; Claus	Lyngby			DK
Olsen; Arne Agerlin	Virum			DK
Roggen; Erwin Ludo	Lyngby			DK

US-CL-CURRENT: 530/402; 435/192, 435/221, 435/252.3, 435/320.1, 435/471, 435/69.1,
536/23.2

ABSTRACT:

The present invention relates to polypeptide-polymer conjugates having added and/or removed one or more attachment groups for coupling polymeric molecules on the surface of the polypeptide structure, a method for preparing polypeptide-polymer conjugates of the invention, the use of said conjugated for reducing the immunogenicity and allergenicity and compositions comprising said conjugate.

23 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

 42. Document ID: US 6242405 B1

L2: Entry 42 of 80

File: USPT

Jun 5, 2001

US-PAT-NO: 6242405

DOCUMENT-IDENTIFIER: US 6242405 B1

TITLE: Enzyme-containing particles and liquid detergent concentrate

DATE-ISSUED: June 5, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lykke; Mads	Bronshoj			DK
Mistry; Kishor Kumar	West Yorkshire			GB
Simonsen; Ole	Soborg			DK
Symes; Kenneth Charles	West Yorkshire			GB

US-CL-CURRENT: 510/321, 435/177, 435/188, 510/320, 523/201

ABSTRACT:

A liquid detergent concentrate has an outer liquid detergent phase and enzyme containing particles dispersed in the liquid phase. The particles have a polymer shell formed from a condensation polymer which is permeable to water and low molecular weight components of the outer liquid phase and the core comprises the enzyme, an inner liquid detergent phase in substantially equilibrium with the outer phase and a core polymer which causes stretching as a result of osmosis when the concentrate is diluted in water. Encapsulated precipitated enzymes are also disclosed.

17 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	RWMC
Draw Desc		Image								

43. Document ID: US 6228128 B1

L2: Entry 43 of 80

File: USPT

May 8, 2001

US-PAT-NO: 6228128

DOCUMENT-IDENTIFIER: US 6228128 B1

TITLE: Antimicrobial activity of laccases

DATE-ISSUED: May 8, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Johansen; Charlotte	DK-2840 Holte			DK
Pedersen; Anders Hjelholt	DK-2800 Lyngby			DK
Fuglsang; Claus Crone	2990 Nivaa			DK

US-CL-CURRENT: 8/137, 134/42, 422/28, 424/78.03, 424/78.07, 510/114, 510/131, 510/137,
510/161, 510/226, 510/320, 510/321, 510/392, 510/530

ABSTRACT:

A method for antimicrobial treatment of microorganisms and/or viruses which involves treating the microorganisms and/or viruses with an effective amount of a fungal laccase and one or more enhancers in the presence of oxygen, the enhancers having the formula:
##STR1##

wherein A, B and C are as defined in the specification.

20 Claims, 5 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc Image										

44. Document ID: US 6207436 B1

L2: Entry 44 of 80

File: USPT

Mar 27, 2001

US-PAT-NO: 6207436

DOCUMENT-IDENTIFIER: US 6207436 B1

TITLE: Endo-B-1,4-glucanases from saccharothrix

DATE-ISSUED: March 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bj.o slashed.rnvad; Mads Eskelund	Frederiksberg			DK
Hatakeyama; Mariko	Fairfield	CA		
Schulein; Martin	Copenhagen			DK
Nielsen; Jack Bech	Hellerup			DK

US-CL-CURRENT: 435/209; 435/183, 435/195, 435/200, 536/23.2

ABSTRACT:

An enzyme preparation comprising an enzyme having endo-.beta.-1,4-glucanase activity obtainable from or endogeneous to a strain belonging to the genus *Saccharothrix* such as *Saccharothrix australiensis*, IFO 14444; an isolated polynucleotide (DNA) molecule encoding an enzyme or enzyme core (the catalytically active domain of the enzyme) exhibiting endo-.beta.-1,4-glucanase activity selected from (a) polynucleotide molecules comprising a nucleotide sequence as shown in SEQ ID NO:1 from nucleotide 676 to nucleotide 1470, (b) polynucleotide molecules that encode a polypeptide that is at least 80% identical to the amino acid sequence of SEQ ID NO:2 from amino acid residue 226 to amino acid residue 490, and (c) degenerate nucleotide sequences of (a) or (b), the expressed endoglucanase and the enzyme preparation being useful in a detergent or fabric softener composition or in the textile industry for improving the properties of cellulosic fibres or fabric or for providing a stone-washed look of denim.

6 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc Image										

45. Document ID: US 6201110 B1

L2: Entry 45 of 80

File: USPT

Mar 13, 2001

US-PAT-NO: 6201110

DOCUMENT-IDENTIFIER: US 6201110 B1

TITLE: Polypeptide with reduced respiratory allergenicity

DATE-ISSUED: March 13, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Olsen; Arne Agerlin	Virum			DK
Hansen; Lars Bo	Herlev			DK
Beck; Thomas Christian	Birker.o slashed.d			DK

US-CL-CURRENT: 530/402; 435/189, 435/190, 530/350, 530/403

ABSTRACT:

The invention relates to modified polypeptides with reduced respiratory allergenicity comprising a parent polypeptide with a molecular weight from between 10 kDa and 100 kDa conjugated to a polymer with a molecular weight (M_{sub.r}) in the range of 1 kDa and 60 kDa. The modified polypeptide are produced using a process including the step of conjugating from 1 to 30 polymer molecules with the parent polypeptide. Further the invention relates to compositions comprising said polypeptides and further ingredients normally used in e.g. detergents, including dishwashing detergents and soap bars, household article, agrochemicals, personal care products, cosmetics, toiletries, oral and dermal pharmaceuticals, composition for treating textiles, and compositions used for manufacturing food and feed. Finally the invention is directed to uses of polypeptides with reduced allergenicity or compositions thereof for reducing the allergenicity of products for a vast number of industrial applications.

14 Claims, 5 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

46. Document ID: US 6184010 B1

L2: Entry 46 of 80

File: USPT

Feb 6, 2001

US-PAT-NO: 6184010

DOCUMENT-IDENTIFIER: US 6184010 B1

TITLE: Enzymatic hydrolysis of cyclic oligomers

DATE-ISSUED: February 6, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Riegels; Martin	Leichlingen			DE
Koch; Rainhard	Koln			DE
Pedersen; Lars Saaby	Farum			DK
Lund; Henrik	Raleigh	NC		

US-CL-CURRENT: 435/135; 435/134, 435/136, 435/145, 435/196

ABSTRACT:

The present invention relates to a process for enzymatic hydrolysis of cyclic oligomers of poly(ethylene terephthalate), which process comprises subjecting the cyclic oligomer to the action of one or more lipolytic and/or biopolyester hydrolytic enzyme(s).

9 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawn Descr Image					KMC				

47. Document ID: US 6177012 B1

L2: Entry 47 of 80

File: USPT

Jan 23, 2001

US-PAT-NO: 6177012

DOCUMENT-IDENTIFIER: US 6177012 B1

** See image for Certificate of Correction **

TITLE: Enzyme-producing strain of bacillus bacteria

DATE-ISSUED: January 23, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lawler; David	Cheshire	CT		
Smith; Steven	Cheshire	CT		

US-CL-CURRENT: 210/606; 210/600, 210/611, 424/93.46, 426/442, 426/61, 426/807,
435/252.4, 435/252.5, 435/264, 435/267, 435/821, 435/832

ABSTRACT:

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

10 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawn Descr Image					KMC				

48. Document ID: US 6174718 B1

L2: Entry 48 of 80

File: USPT

Jan 16, 2001

US-PAT-NO: 6174718

DOCUMENT-IDENTIFIER: US 6174718 B1

TITLE: Enzyme-producing strain of Bacillus bacteria

DATE-ISSUED: January 16, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lawler; David	Cheshire	CT		
Smith; Steven	Cheshire	CT		

US-CL-CURRENT: 435/252.5; 210/600, 210/601, 210/610, 426/53, 435/252.4, 435/262.5,
435/822, 435/832

ABSTRACT:

This invention presents a newly discovered, novel strain of *Bacillus* bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, and protease enzymes to degrade proteins. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

10 Claims, 4 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

□ 49. Document ID: US 6171848 B1

L2: Entry 49 of 80

File: USPT

Jan 9, 2001

US-PAT-NO: 6171848
DOCUMENT-IDENTIFIER: US 6171848 B1
** See image for Certificate of Correction **

TITLE: Enzyme-producing strain of *Bacillus* bacteria

DATE-ISSUED: January 9, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lawler; David	Cheshire	CT		
Smith; Steven	Cheshire	CT		

US-CL-CURRENT: 435/252.5; 210/600, 210/601, 424/93.46, 426/2, 426/442, 426/807,
435/262.5, 435/267, 435/832

ABSTRACT:

This invention presents a newly discovered, novel strain of *Bacillus* bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

9 Claims, 4 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

□ 50. Document ID: US 6171847 B1

L2: Entry 50 of 80

File: USPT

Jan 9, 2001

US-PAT-NO: 6171847

DOCUMENT-IDENTIFIER: US 6171847 B1

TITLE: Enzyme-producing strain of *Bacillus* bacteria

DATE-ISSUED: January 9, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lawler; David	Cheshire	CT		
Smith; Steven	Cheshire	CT		

US-CL-CURRENT: 435/252.5; 210/600, 210/601, 424/93.46, 426/2, 426/442, 426/807,
435/262.5, 435/267, 435/832

ABSTRACT:

This invention presents a newly discovered, novel strain of *Bacillus* bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

9 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KM/C
Draw. Desc	Image									

51. Document ID: US 6165770 A

L2: Entry 51 of 80

File: USPT

Dec 26, 2000

US-PAT-NO: 6165770

DOCUMENT-IDENTIFIER: US 6165770 A

TITLE: Alkaline stable amylase from *Thermoalcalibacter*

DATE-ISSUED: December 26, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sj.o slashed.holm; Carsten	Aller.o slashed.d			DK
Antranikian; Garabed	Hamburg			DE
Prowe; Steffan	Hamburg			DE

US-CL-CURRENT: 435/202; 510/392, 510/531

ABSTRACT:

The present invention relates to a novel alkali stable amylase obtained from *Thermoalcalibacter bogoriae*, an enzyme composition comprising said amylase, and the use of said enzyme and enzyme composition for a number of industrial applications.

8 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KOMC				

□ 52. Document ID: US 6162635 A

L2: Entry 52 of 80

File: USPT

Dec 19, 2000

US-PAT-NO: 6162635

DOCUMENT-IDENTIFIER: US 6162635 A

** See image for Certificate of Correction **

TITLE: Enzyme-producing strain of Bacillus bacteria

DATE-ISSUED: December 19, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lawler; David	Cheshire	CT		
Smith; Steven	Cheshire	CT		

US-CL-CURRENT: 435/252.5, 210/601, 210/610, 210/611, 426/53, 435/252.4, 435/262.5,
435/832, 435/839

ABSTRACT:

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

9 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KOMC				

□ 53. Document ID: US 6162634 A

L2: Entry 53 of 80

File: USPT

Dec 19, 2000

US-PAT-NO: 6162634

DOCUMENT-IDENTIFIER: US 6162634 A

** See image for Certificate of Correction **

TITLE: Enzyme-producing strain of Bacillus bacteria

DATE-ISSUED: December 19, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lawler; David	Cheshire	CT		
Smith; Steven	Cheshire	CT		

US-CL-CURRENT: 435/252.5, 210/601, 210/610, 210/611, 426/53, 435/252.4, 435/262.5,
435/832, 435/839

ABSTRACT:

This invention presents a newly discovered, novel strain of *Bacillus* bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

9 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KM/C
Draw Desc	Image									

 54. Document ID: US 6162260 A

L2: Entry 54 of 80

File: USPT

Dec 19, 2000

US-PAT-NO: 6162260

DOCUMENT-IDENTIFIER: US 6162260 A

TITLE: Single-bath biopreparation and dyeing of textiles

DATE-ISSUED: December 19, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Liu; Jiyin	Raleigh	NC		
Condon; Brian	Wake Forest	NC		
Showmaker, III; Harry Lee	Raleigh	NC		

US-CL-CURRENT: 8/401

ABSTRACT:

The present invention provides methods for single-bath biopreparation and dyeing of cellulosic fibers, which are carried out by contacting the fibers simultaneously or sequentially with a pectin-degrading enzyme, preferably pectate lyase, and a dyeing system, under conditions that do not require emptying the bath or rinsing the fabric between biopreparation and dyeing steps.

22 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KM/C
Draw Desc	Image									

 55. Document ID: US 6140106 A

L2: Entry 55 of 80

File: USPT

Oct 31, 2000

US-PAT-NO: 6140106

DOCUMENT-IDENTIFIER: US 6140106 A

** See image for Certificate of Correction **

TITLE: Enzyme-producing strain of *Bacillus subtilis*

DATE-ISSUED: October 31, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lawler; David	Cheshire	CT		
Smith; Steven	Cheshire	CT		

US-CL-CURRENT: 435/252.5; 210/601, 210/602, 426/2, 426/442, 426/807, 435/252.4,
435/262.5, 435/839

ABSTRACT:

This invention presents a newly discovered, novel strain of *Bacillus* bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

9 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								KMC

56. Document ID: US 6126698 A

L2: Entry 56 of 80

File: USPT

Oct 3, 2000

US-PAT-NO: 6126698

DOCUMENT-IDENTIFIER: US 6126698 A

TITLE: Continuous biopolishing of cellulose-containing fabrics

DATE-ISSUED: October 3, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Liu; Jiyin	Raleigh	NC		
Condon; Brian	Wake Forest	NC		

US-CL-CURRENT: 8/401; 435/263, 8/116.1

ABSTRACT:

A method for continuously biopolishing cellulose-containing fabrics is disclosed. This method involves (a) contacting the fabric with a cellulase having low affinity for cellulose and (b) subjecting the contacted fabric to high temperature. Treatment of the cellulose-containing material may be carried out as an additional step or a combined step with chemical preparation, dyeing, printing and finishing. This treatment results in excellent pilling performance, minimal loss in fabric strength and weight, and better wettability.

14 Claims, 2 Drawing figures

Exemplary Claim Number: 1
Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image									KMC

57. Document ID: US 6087148 A

L2: Entry 57 of 80

File: USPT

Jul 11, 2000

US-PAT-NO: 6087148

DOCUMENT-IDENTIFIER: US 6087148 A

TITLE: Method of purification of cellulose from a broth solution by crystallization

DATE-ISSUED: July 11, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rancke-Madsen; Anders	Charlottenlund			DK
Laustsen; Mads Aage	Lyngby			DK

US-CL-CURRENT: 435/209; 117/927, 435/816

ABSTRACT:

A method for purification, and isolation in crystalline form, of a cellulase from a broth comprises: treating the broth with a crystallization-effective amount of a water-miscible organic solvent (e.g. a lower aliphatic alcohol or ketone); and isolating the cellulase in question in crystalline form.

8 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image									KMC

58. Document ID: US 6083737 A

L2: Entry 58 of 80

File: USPT

Jul 4, 2000

US-PAT-NO: 6083737

DOCUMENT-IDENTIFIER: US 6083737 A

TITLE: Enzyme-producing strain of *Bacillus pumilus*

DATE-ISSUED: July 4, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lawler; David	Cheshire	CT		
Smith; Steven	Cheshire	CT		

US-CL-CURRENT: 435/252.5; 210/601, 210/602, 426/2, 426/442, 426/807, 435/252.4,
435/262.5, 435/832

ABSTRACT:

This invention presents a newly discovered, novel strain of *Bacillus* bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, and protease enzymes to degrade proteins. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

10 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

59. Document ID: US 6071356 A

L2: Entry 59 of 80

File: USPT

Jun 6, 2000

US-PAT-NO: 6071356

DOCUMENT-IDENTIFIER: US 6071356 A

TITLE: Cleaning-in-place with a solution containing a protease and a lipase

DATE-ISSUED: June 6, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Olsen; Hans Sejr	Holte			DK

US-CL-CURRENT: 134/26; 134/27, 134/28, 134/29, 510/111, 510/218, 510/234, 510/392,
510/530

ABSTRACT:

The present invention relates to methods of cleaning-in-place soiled process equipment comprising circulating a solution comprising a protease and a lipase for a sufficient period of time to permit action of the enzymes.

12 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

60. Document ID: US 6066481 A

L2: Entry 60 of 80

File: USPT

May 23, 2000

US-PAT-NO: 6066481

DOCUMENT-IDENTIFIER: US 6066481 A

TITLE: Crystallization of a protein with a sulphur salt

DATE-ISSUED: May 23, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nielsson; Stig	Lynge			DK
Laustsen; Mads Aage	Lyngby			DK

US-CL-CURRENT: 435/183; 210/702, 435/189, 435/195, 435/198, 435/202, 435/219, 435/220,
435/221, 435/816

ABSTRACT:

The present invention relates to a method for crystallization of a protein obtained from a protein-containing solution which involves (a) treating the protein-containing solution with a salt containing a sulphur atom having an oxidation state less than 6, and (b) recovering the protein in crystalline form.

13 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

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Terms	Documents
lipase same bacillus same pumilus	80

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WEST[Generate Collection](#)[Print](#)**Search Results - Record(s) 61 through 80 of 80 returned.****□ 61. Document ID: US 6031082 A**

L2: Entry 61 of 80

File: USPT

Feb 29, 2000

US-PAT-NO: 6031082

DOCUMENT-IDENTIFIER: US 6031082 A

TITLE: Increased yields of a crystallized protein by using a solid adsorption material

DATE-ISSUED: February 29, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nielsson; Stig	Lynge			DK
Murmann; Niels	Lyngby			DK
Simpson; Curran	Youngsville	NC		

US-CL-CURRENT: 530/413; 530/415, 530/416, 530/417, 530/418

ABSTRACT:

The invention deals with a method for crystallizing in increased yields a polypeptide or a protein obtained from a protein solution comprising more than one protein, comprising:

- (a) treating the protein solution with a solid adsorption material; and
- (b) crystallizing the polypeptide or the protein after said solid adsorption material has been removed; or
- (c) crystallizing the polypeptide or the protein without removing said adsorption material.

17 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawn Desc	Image								

KOMC

□ 62. Document ID: US 6025152 A

L2: Entry 62 of 80

File: USPT

Feb 15, 2000

US-PAT-NO: 6025152

DOCUMENT-IDENTIFIER: US 6025152 A

TITLE: Denitrifying bacterial preparation and method

DATE-ISSUED: February 15, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hiatt; William N.	Long Beach	CA	90807	

US-CL-CURRENT: 435/42; 435/262, 435/264, 435/832, 435/834, 435/836, 435/839

ABSTRACT:

A method and mixture for denitrifying aerobic bacterial compositions and for aerobic methods for biological treatment of aqueous systems polluted by nitrogen waste products. A mixture of and limited to bacillus bacteria are added to the treatment subject. Optionally enzymes can be added to the mixture. Optionally a particulate carbon ingredient can be placed into the treatment subject. Optionally a living tissue ingredient can be used.

29 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

 63. Document ID: US 6017751 A

L2: Entry 63 of 80

File: USPT

Jan 25, 2000

US-PAT-NO: 6017751

DOCUMENT-IDENTIFIER: US 6017751 A

TITLE: Process and composition for desizing cellulosic fabric with an enzyme hybrid

DATE-ISSUED: January 25, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
von der Osten; Claus	Lyngby			DK
Bjornvad; Mads E.	Frederiksberg			DK
Vind; Jesper	Lyngby			DK
Rasmussen; Michael Dolberg	Vallensbaek			DK

US-CL-CURRENT: 435/263; 435/198, 435/202, 435/69.7, 435/71.1, 510/530

ABSTRACT:

Cellulose-containing fabric is desized by treating with an enzyme hybrid having a catalytically active amino acid sequence of an enzyme such as a lipase or an amylase linked to an amino acid sequence containing a cellulose-binding domain. The enzyme amino acid sequence may be of an .alpha.-amylase obtainable from a species of Bacillus such as Bacillus licheniformis, or of a lipase obtainable from a species of Humicola, Candida, Pseudomonas or Bacillus. The cellulose-binding domain may be from a cellulase, a xylanase, a mannanase, an arabinofuranosidase, an acetyl esterase or a chitinase. The enzyme hybrid is obtained from a transformed host cell containing an expression cassette having a DNA sequence encoding the enzyme hybrid. A desizing composition is formed containing the enzyme hybrid and a wetting agent.

9 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc Image										

64. Document ID: US 6015783 A

L2: Entry 64 of 80

File: USPT

Jan 18, 2000

US-PAT-NO: 6015783

DOCUMENT-IDENTIFIER: US 6015783 A

TITLE: Process for removal or bleaching of soiling or stains from cellulosic fabric

DATE-ISSUED: January 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
von der Osten; Claus	Lyngby			DK
Cherry; Joel R.	Davis	CA		
Bjornvad; Mads E.	Frederiksberg			DK
Vind; Jesper	Lyngby			DK
Rasmussen; Michael Dolberg	Vallensbaek			DK

US-CL-CURRENT: 510/392

ABSTRACT:

The present invention relates to a process for removal or bleaching of soiling or stains present on cellulosic fabric, wherein the fabric is contacted in aqueous medium with a modified enzyme (enzyme hybrid) which comprises a catalytically active amino acid sequence of a non-cellulolytic enzyme linked to an amino acid sequence comprising a cellulose-binding domain. The invention further relates to a detergent composition comprising an enzyme hybrid of the type in question and a surfactant, and to a process for washing soiled or stained cellulosic fabric, wherein the fabric is washed in an aqueous medium to which is added such a detergent composition.

11 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc Image										

65. Document ID: US 5997584 A

L2: Entry 65 of 80

File: USPT

Dec 7, 1999

US-PAT-NO: 5997584

DOCUMENT-IDENTIFIER: US 5997584 A

** See image for Certificate of Correction **

TITLE: Method of treating polyester fabrics

DATE-ISSUED: December 7, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Andersen; Bente Konggaard	Lyngby			DK
Borch; Kim	K.o slashed.benhavn K			DK
Abo; Masanobu	Chiba-ken			JP
Damgaard; Bo	Lausanne			CH

US-CL-CURRENT: 8/137, 435/263, 435/264, 510/300, 8/137.5, 8/401

ABSTRACT:

This invention relates to a method of reducing the pilling propensity or colour clarity of polyester fabrics and/or garments, which method comprises treating the fabric with a polyester hydrolytic enzyme and a detergent.

10 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

66. Document ID: US 5976855 A

L2: Entry 66 of 80

File: USPT

Nov 2, 1999

US-PAT-NO: 5976855

DOCUMENT-IDENTIFIER: US 5976855 A

TITLE: Method of preparing a variant of a lipolytic enzyme

DATE-ISSUED: November 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Svendsen; Allan	Birker.o slashed.d			DK
Clausen; Ib Groth	Hiller.o slashed.d			DK
Okkels; Jens Sigurd	Frederiksberg C			DK
Thellersen; Marianne	Frederiksberg C			DK

US-CL-CURRENT: 435/198, 435/252.3, 435/320.1, 435/471, 435/69.1, 435/832, 435/849,
435/874, 435/886, 435/911, 435/913, 536/23.2

ABSTRACT:

The present invention relates to a method of preparing a variant of a parent lipolytic enzyme, comprising (a) subjecting a DNA sequence encoding the parent lipolytic enzyme to random mutagenesis, (b) expressing the mutated DNA sequence obtained in step (a) in a host cell, and (c) screening for host cells expressing a mutated lipolytic enzyme which has a decreased dependence to calcium and/or an improved tolerance towards a detergent or a detergent component as compared to the parent lipolytic enzyme.

21 Claims, 5 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

□ 67. Document ID: US 5972873 A

L2: Entry 67 of 80

File: USPT

Oct 26, 1999

US-PAT-NO: 5972873

DOCUMENT-IDENTIFIER: US 5972873 A

TITLE: 4-substituted-phenyl-boronic acids as enzyme stabilizers

DATE-ISSUED: October 26, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nielsen; Lone Kierstein	Bagsvaerd			DK
Deane-Wray; Allison	Hampshire			GB

US-CL-CURRENT: 510/392; 510/320, 510/321, 510/393, 510/465, 510/530

ABSTRACT:

The present invention relates to a liquid composition comprising an enzyme and a phenyl boronic acid derivative enzyme stabilizer of the following formula: ##STR1## wherein R is selected from the group consisting of hydrogen, hydroxy, C._{sub.1} -C._{sub.6} alkyl, substituted C._{sub.1} -C._{sub.6} alkyl, C._{sub.1} -C._{sub.6} alkenyl and substituted C._{sub.1} -C._{sub.6} alkenyl.

20 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	DOC
Draw Desc	Image									

DOC**□ 68. Document ID: US 5968883 A**

L2: Entry 68 of 80

File: USPT

Oct 19, 1999

US-PAT-NO: 5968883

DOCUMENT-IDENTIFIER: US 5968883 A

TITLE: Peroxidase variants

DATE-ISSUED: October 19, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cherry; Joel R.	Davis	CA		
Svendsen; Allan	Birker.o slashed.d			DK
Damhus; Ture	Copenhagen .O slashed.			DK
Schneider; Palle	Ballerup			DK

US-CL-CURRENT: 510/305; 435/192, 510/374, 510/392

ABSTRACT:

The present invention relates to novel variants of *Coprinus cinereus* peroxidase showing excellent hydrogen peroxide stability.

18 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawn Desc Image					KMC				

□ 69. Document ID: US 5919746 A

L2: Entry 69 of 80

File: USPT

Jul 6, 1999

US-PAT-NO: 5919746

DOCUMENT-IDENTIFIER: US 5919746 A

TITLE: Alkaline lipolytic enzyme

DATE-ISSUED: July 6, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hirayama; Satoshi	Chiba			JP
Halkier; Torben	Birkeroed			DK

US-CL-CURRENT: 510/392; 435/198, 510/320, 510/321, 510/393

ABSTRACT:

The present invention relates to an alkaline lipolytic enzyme derivable from a strain of *Botryosphaeria* or *Guignardia*, to a lipolytic enzyme-producing microbial strain, to methods for the production of lipolytic enzyme and to a detergent composition comprising the lipolytic enzyme.

9 Claims, 2 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawn Desc Image					KMC				

□ 70. Document ID: US 5892013 A

L2: Entry 70 of 80

File: USPT

Apr 6, 1999

US-PAT-NO: 5892013

DOCUMENT-IDENTIFIER: US 5892013 A

TITLE: Lipase variants

DATE-ISSUED: April 6, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Svendsen; Allan	Birker.o slashed.d			DK
Patkar; Shamkant Anant	Lyngby			DK
Gormsen; Erik	Virum			DK
Clausen; Ib Groth	Hiller.o slashed.d			DK
Okkels; Jens Sigurd	Frederiksberg			DK
Thellersen; Marianne	Frederiksberg			DK

US-CL-CURRENT: 536/23.2; 435/198, 435/252.3, 435/320.1, 435/69.1, 536/23.7

ABSTRACT:

The present invention relates to lipase variants which exhibit improved properties, detergent compositions comprising said lipase variants, DNA constructs coding for said lipase variants, and methods of making said lipase variants.

39 Claims, 10 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 10

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMIC
Draw Desc	Image									

71. Document ID: US 5869438 A

L2: Entry 71 of 80

File: USPT

Feb 9, 1999

US-PAT-NO: 5869438

DOCUMENT-IDENTIFIER: US 5869438 A

TITLE: Lipase variants

DATE-ISSUED: February 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Svendsen; Allan	Birker.o slashed.d			DK
Patkar; Shamkant Anant	Lyngby			DK
Gormsen; Erik	Virum			DK
Okkels; Jens Sigurd	Frederiksberg			DK
Thellersen; Marianne	Frederiksberg			DK

US-CL-CURRENT: 510/226; 435/196, 435/198, 435/252.3, 435/320.1, 435/69.1, 510/305, 510/392, 530/350, 536/23.2, 536/23.7

ABSTRACT:

The present invention relates to lipase variants which exhibit improved properties, detergent compositions comprising said lipase variants, DNA constructs coding for said lipase variants, and methods of making said lipase variants.

51 Claims, 10 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 10

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KMC				

□ 72. Document ID: US 5681715 A

L2: Entry 72 of 80

File: USPT

Oct 28, 1997

US-PAT-NO: 5681715

DOCUMENT-IDENTIFIER: US 5681715 A

TITLE: Process for preparing lipases

DATE-ISSUED: October 28, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
J.o slashed.rgensen; Steen Troels	Alleroed			DK
Diderichsen; Boerge Krag	Birkeroed			DK
Buckley; Catherine M.	Cork			IE
Hobson; Audrey	Co. Wicklow			IE
McConnell; David J.	Co. Dublin			IE

US-CL-CURRENT: 435/69.1, 435/198, 435/252.3, 435/252.33, 435/320.1, 435/325, 435/69.7,
536/23.2, 536/23.4, 536/23.7

ABSTRACT:

A process for producing an active lipase enzyme in vitro, comprising mixing an inactive or partly active lipase enzyme with a chaperone molecule and subjecting the mixture to denaturation followed by renaturation to produce the active lipase enzyme.

39 Claims, 13 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KMC				

□ 73. Document ID: US 5427936 A

L2: Entry 73 of 80

File: USPT

Jun 27, 1995

US-PAT-NO: 5427936

DOCUMENT-IDENTIFIER: US 5427936 A

TITLE: Alkaline bacillus lipases, coding DNA sequences therefor and bacilli, which produce these lipases

DATE-ISSUED: June 27, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moeller; Bernhard	Hanover			DE
Vetter; Roman	Burgdorf			DE
Wilke; Detlef	Wennigsen			DE
Foullois; Birgit	Hanover			DE

US-CL-CURRENT: 435/198; 435/252.1, 536/23.2

ABSTRACT:

The invention relates to alkaline bacillus lipases, DNA sequences, which code for these lipases, a method for isolating and producing these lipases, as well as to bacillus strains, which have the capability to form these lipases. The alkaline lipases are suitable for use in compositions for cleaning, washing and bleaching purposes.

7 Claims, 18 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 15

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

74. Document ID: DE 4111321 A1

L2: Entry 74 of 80

File: EPAB

Oct 17, 1991

PUB-NO: DE004111321A1

DOCUMENT-IDENTIFIER: DE 4111321 A1

TITLE: New alkaline lipase from *Bacillus* species - used in low temp., washing, cleaning etc. compsns., also encoding deoxyribonucleic acid, vectors and transformed microorganisms

PUBN-DATE: October 17, 1991

INVENTOR-INFORMATION:

NAME	COUNTRY
MOELLER, BERNHARD	DE
VETTER, ROMAN DIPL BIOL DR	DE
WILKE, DETLEF DIPL BIOL DR	DE
FOULLOIS, BIRGIT DIPL BIOL	DE

INT-CL (IPC): C11D 3/386; C12N 1/21; C12N 9/20; C12N 15/55; C12N 15/75; D06L 3/02

EUR-CL (EPC): C11D003/386; C12N009/20, C12N015/55

ABSTRACT:

New lipases (I), secreted by *Bacillus* species, have pH optimum in the alkaline range and temp. optimum 30-40 deg C. Also new are (i) DNA sequences (II) encoding a *Bacillus* lipase having aminoacid sequence at least 70 (90)% homologous with a sequence (A), (2) transformation vectors contg. (II); (3) transformed microorganisms contg. these vectors; and (4) the *Bacillus pumilus* strains DSM 5776, 5777 and 5778. (A) contains 213 amino acids (including the signal sequence) and is reproduced in the specification together with the encoding DNA sequence (793 bp). USE/ADVANTAGE - Useful in washing, cleaning, bleaching and dishwashing compsns. used at 30-40 deg C. The compsns. pref. also contain a protease.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawn Desc Image					KMC				

75. Document ID: CN 1370829 A

L2: Entry 75 of 80

File: DWPI

Sep 25, 2002

DERWENT-ACC-NO: 2003-060341

DERWENT-WEEK: 200306

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TITLE: Bacterial spawn for treating domestic organic garbage

INVENTOR: ZHAO, G

PRIORITY-DATA: 2001CN-0107596 (February 27, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
CN 1370829 A	September 25, 2002		000	C12N001/20

INT-CL (IPC): B09 B 3/00; C12 N 1/20; C12 S 13/00

ABSTRACTED-PUB-NO: CN 1370829A

BASIC-ABSTRACT:

NOVELTY - The present invention relates to a mixture of several kinds of bacterial spawns, especially bacterial spawn mixture capable of treating domestic organic garbage. The mixture consists of Bacillus megaterium, Bacillus cereus, Bacillus laterosporus, Bacillus lichen formis, Bacillus thuringiensis, Bacillus pumilus, Bacillus thermophilus and Bacillus subtilis generating proteinase, lipase, amylase, chitinase, cellulase, oxidase, etc. separately to decompose macromolecular matter into low molecular matters and to convert the low molecular matters into CO₂, H₂O and small amount of NH₃ of exhaust while releasing energy and eliminating bad smell and pollution. The product invention is used to reduce amount of garbage.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawn Desc Image					KMC				

76. Document ID: KR 2002004477 A

L2: Entry 76 of 80

File: DWPI

Jan 16, 2002

DERWENT-ACC-NO: 2002-497539

DERWENT-WEEK: 200254

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TITLE: Microbial adsorbent matrix for treating garbage

INVENTOR: KOO, Y H; SEO, D J ; SEO, H H

PRIORITY-DATA: 2000KR-0038385 (July 5, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
KR 2002004477 A	January 16, 2002		000	C12N001/00

INT-CL (IPC): C12 N 1/00

ABSTRACTED-PUB-NO: KR2002004477A

BASIC-ABSTRACT:

NOVELTY - A microbial adsorbent matrix for treating garbage. Bacillus pumilus removes odor of ammonia, Bacillus subtilis activates lipase, Bacillus sp. activates antibiosis, Thiobacillus sp. reduces hydrogen sulfide, Cellulomonas fimi activates cellulase, and Streptomyces sp. activates protease. Therefore, garbage is treated efficiently by the microbial adsorbent matrix.

DETAILED DESCRIPTION - The microbial adsorbent is prepared by (i) culturing microbes, Bacillus pumilus, Bacillus subtilis, Bacillus sp., Thiobacillus sp., Cellulomonas fimi, and Streptomyces sp.; (ii) mixing those bacteria with an adsorbent selected from celite, zeolite, vermiculite, white carbon, activated carbon and alginic acid to inoculate in the adsorbent; (iii) fixing for 12 hours at 30-40 deg.C; and (iv) mixing with 5kg of a mixture comprising defatted rice bran 65 wt.%, wheat bran 25 wt.%, bean cake 9 wt.%, and yeast extract 1 wt.%.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KCCM
Drawn Desc	Image									

77. Document ID: KR 354655 B KR 2001111240 A

L2: Entry 77 of 80

File: DWPI

Sep 30, 2002

DERWENT-ACC-NO: 2002-390563

DERWENT-WEEK: 200324

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TITLE: Novel Bacillus pumilus br060 (kccm 10184) with a particular reactivity to optical isomers and its use, lipase produced from it, Escherichia coli publ (kccm 10185) transformed by DNA coding the lipase and its uses

INVENTOR: CHO, J G; KIM, S R ; LIM, S M ; OH, S Y ; SONG, S W ; CHO, J K ; YIM, S M

PRIORITY-DATA: 2000KR-0031807 (June 9, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
KR 354655 B	September 30, 2002		000	C12N001/20
KR 2001111240 A	December 17, 2001		000	C12N001/20

INT-CL (IPC): C12 N 1/20

ABSTRACTED-PUB-NO: KR2001111240A

BASIC-ABSTRACT:

NOVELTY - Novel Bacillus pumilus BR060 (KCCM 10184) with the particular reactivity to optical isomers and its uses and lipase produced from it, Escherichia coli pUBL (KCCM 10185) transformed by DNA coding the lipase and its use, thereby economically and effectively producing (-)-9-halogeno-3-methyl-10(4-methyl-1-piperazinyl)-7-oxo-2,3-dihydro-7H-pyrido(1,2,3-de) (1,4)-benzoxazine-6-carboxylic acid.

DETAILED DESCRIPTION - Novel Bacillus pumilus BR060 (KCCM 10184) has lipase-coding DNA represented by a sequence fully defined in the specification, and amino acid sequence fully defined in the specification. A recombinant expression vector plasmid pUBL contains the lipase-coding DNA and a transformed E.coli pUBL. Optical active benzoxazine derivative is manufactured by asymmetrically hydrolyzing ester part of (plus or minus)-9-halogeno-3-methyl-10(4-methyl-1-piperazinyl)-7-oxo-2,3-dihydro-7H-pyrido (1,2,3-de) (1,4)-benzoxazine-6-carboxylic acid ester.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc Image										

78. Document ID: US 6083737 A

L2: Entry 78 of 80

File: DWPI

Jul 4, 2000

DERWENT-ACC-NO: 2000-451508

DERWENT-WEEK: 200039

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TITLE: New Bacillus pumilus strain and the lipase enzymes it produces, useful in the treatment of wastewater, plumbing system components and animal feed

INVENTOR: LAWLER, D; SMITH, S

PRIORITY-DATA: 1999US-0291061 (April 14, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6083737 A	July 4, 2000		011	A23K001/18

INT-CL (IPC): A23 K 1/18; B09 B 3/00; C02 F 3/00; C12 N 1/00; C12 N 1/20

ABSTRACTED-PUB-NO: US 6083737A

BASIC-ABSTRACT:

NOVELTY - An isolated microorganism of the strain Bacillus (ATCC 202136), is new.

DETAILED DESCRIPTION - (I) was further identified as Bacillus pumilus GC subgroup B by the Fatty Acid Methyl Ester Analysis method using Trypticase Soy Broth Agar version 3.9 at 28 deg. C of the database of Microcheck Inc., Northfield, Vt.

An INDEPENDENT CLAIM is also included for a composition comprising (I) and one or more other microorganisms.

USE - The bacteria and the composition comprising the bacteria and one or more other microorganisms are useful in the treatment of wastewater, plumbing system components and animal feed (claimed).

DESCRIPTION OF DRAWING(S) - The figure charts the production of lipase enzymes at various points within a temperature range by Bacillus amyloliquefaciens strains RLM-007Ab (ATCC 202133) and RLM-012B (ATCC 202134).

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc Image										

79. Document ID: DE 69529080 E WO 9610079 A1 AU 9535176 A FI 9701262 A EP 781328 A1 MX 9702041 A1 BR 9509046 A JP 10506282 W KR 97706388 A US 5912405 A CN 1158636 A MX 200939 B EP 781328 B1

L2: Entry 79 of 80

File: DWPI

Jan 16, 2003

DERWENT-ACC-NO: 1996-200918

DERWENT-WEEK: 200313

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TITLE: Oxidn. of cpds. esp. dyes in soln., used e.g. for bleaching textile dyes - with phenol oxidising enzyme enhanced by addn. of enhancing agent, esp. acetyl:syringone or

syringic acid deriv.

INVENTOR: DAMHUS, T; SCHNEIDER, P

PRIORITY-DATA: 1995DK-0001044 (September 19, 1995), 1994DK-0001109 (September 27, 1994), 1995DK-0000952 (August 25, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 69529080 E	January 16, 2003		000	C12N009/02
WO 9610079 A1	April 4, 1996	E	056	C12N009/02
AU 9535176 A	April 19, 1996		000	C12N009/02
FI 9701262 A	March 26, 1997		000	C11D000/00
EP 781328 A1	July 2, 1997	E	000	C12N009/02
MX 9702041 A1	June 1, 1997		000	C12N009/02
BR 9509046 A	July 14, 1998		000	C12N009/02
JP 10506282 W	June 23, 1998		059	C12N009/02
KR 97706388 A	November 3, 1997		000	C12N009/02
US 5912405 A	June 15, 1999		000	C11D003/386
CN 1158636 A	September 3, 1997		000	C12N009/02
MX 200939 B	March 6, 2001		000	C11D003/386
EP 781328 B1	December 4, 2002	E	000	C12N009/02

INT-CL (IPC): C11 D 0/00; C11 D 3/20; C11 D 3/386; C11 D 3/395; C12 N 9/02; C12 N 9/08; C12 S 11/00; D06 L 3/00; D06 P 3/02

ABSTRACTED-PUB-NO: US 5912405A

BASIC-ABSTRACT:

A detergent additive (I) comprises (a) a phenol-oxidising enzyme and (b) an enhancing agent of formula (I) (where A = e.g. -D, -CH=CH-D, -CH=CH-CH=CH-D, -CH=N-D or -N=CH-D, where D = -CO-E, -SO₂-E, -N-XY or -N+-XYZ; E = -H, -OH, -R, or -OR; X, Y, Z = H or -R; R = 1-16C, pref. 1-8C alkyl opt. substd. with carboxy, sulpho or amino; B, C = C_mH_{2m+1} where m = 1-5).

Also claimed is a detergent compsn. (II) comprising (a), (b) and a surfactant. Further claimed is a method (III) of oxidising a cpd. with a phenol-oxidising enzyme, characterised by the presence of enhancing agent (b).

Pref. (a) Is a peroxidase and a hydrogen peroxide source, or a laccase or related enzyme together with oxygen. Peroxidases may be derived from soybean, horseradish, Coprinus (e.g. cinereus or macrorhizus), Bacillus (e.g. pumilus) or Mycococcus (e.g. virescens). Lacases may be derived from Trametes (e.g. villosa) or Coprinus (e.g. cinereus), or may be bilirubin oxidase derived from Myrothecium (e.g. verrucaria). Hydrogen peroxide source is the peroxide itself or a precursor, e.g. perborate, percarbonate, peroxicarboxylic acid or a hydrogen peroxide generating enzyme. (b) Is acetosyringone, syringaldehyde, methyl syringate or syringic acid. (I) May be in form of granulate, liquid, slurry or protected enzyme. (II) May additionally contain further enzyme(s), esp. protease, lipase, amylase, cellulase and/or cutinase. In method (III), (b) is 0.01-1000, esp. 1-100mum. (b) May be added at the beginning or during the process.

USE - Used for bleaching textile dyes or colourants, esp. when in soln., e.g. in household or institutional laundering operations, or in process water obtnd. during textile processing; transfer of dyes from one fabric to another when the two are washed together may be inhibited. Paper pulp may be bleached, and lignin modified in mfr. of wood composites. Waste water contg. dyes may be treated.

ADVANTAGE - (b) Speed bleaching by (a); some cpds. which cannot normally be bleached by (a) are bleached in presence of (b).

ABSTRACTED-PUB-NO:

WO 9610079A EQUIVALENT-ABSTRACTS:

A detergent additive (I) comprises (a) a phenol-oxidising enzyme and (b) an enhancing

agent of formula (I) (where A = e.g. -D, -CH=CH-D, -CH=CH-CH=CH-D, -CH=N-D or -N=CH-D, where D = -CO-E, -SO₂-E, -N-XY or -N+-XYZ; E = -H, -OH, -R, or -OR; X, Y, Z = H or -R; R = 1-16C, pref. 1-8C alkyl opt. subst. with carboxy, sulpho or amino; B, C = C_mH_{2m+1} where m = 1-5).

Also claimed is a detergent compsn. (II) comprising (a), (b) and a surfactant. Further claimed is a method (III) of oxidising a cpd. with a phenol-oxidising enzyme, characterised by the presence of enhancing agent (b).

Pref. (a) Is a peroxidase and a hydrogen peroxide source, or a laccase or related enzyme together with oxygen. Peroxidases may be derived from soybean, horseradish, *Coprinus* (e.g. *cinereus* or *macrorhizus*), *Bacillus* (e.g. *pumilus*) or *Mycococcus* (e.g. *virescens*). Laccases may be derived from *Trametes* (e.g. *villosa*) or *Coprinus* (e.g. *cinereus*), or may be bilirubin oxidase derived from *Myrothecium* (e.g. *verrucaria*). Hydrogen peroxide source is the peroxide itself or a precursor, e.g. perborate, percarbonate, peroxicarboxylic acid or a hydrogen peroxide generating enzyme. (b) Is acetosyringone, syringaldehyde, methyl syringate or syringic acid. (I) May be in form of granulate, liquid, slurry or protected enzyme. (II) May additionally contain further enzyme(s), esp. protease, lipase, amylase, cellulase and/or cutinase. In method (III), (b) is 0.01-1000, esp. 1-100 μm. (b) May be added at the beginning or during the process.

USE - Used for bleaching textile dyes or colourants, esp. when in soln., e.g. in household or institutional laundering operations, or in process water obtd. during textile processing; transfer of dyes from one fabric to another when the two are washed together may be inhibited. Paper pulp may be bleached, and lignin modified in mfr. of wood composites. Waste water contg. dyes may be treated.

ADVANTAGE - (b) Speed bleaching by (a); some cpds. which cannot normally be bleached by (a) are bleached in presence of (b).

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMPC
Draw Desc	Clip Img	Image								

□ 80. Document ID: DE 4111321 A KR 236540 B1 WO 9116422 A EP 528828 A1 JP 05505939 W EP 528828 B1 DE 59101948 G ES 2055601 T3 US 5427936 A EP 528828 B2 JP 3112937 B2

L2: Entry 80 of 80

File: DWPI

Oct 17, 1991

DERWENT-ACC-NO: 1991-311800

DERWENT-WEEK: 200114

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TITLE: New alkaline lipase from *Bacillus* species - used in low temp., washing, cleaning etc. compsns., also encoding deoxyribonucleic acid, vectors and transformed microorganisms

INVENTOR: FOULLOIS, B; MOLLER, B ; VETTER, R ; WILKE, D ; MOELLER, B

PRIORITY-DATA: 1991DE-4111321 (April 8, 1991), 1990DE-4012070 (April 14, 1990)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 4111321 A	October 17, 1991		000	
KR 236540 B1	January 15, 2000		000	C12N009/20
WO 9116422 A	October 31, 1991		000	
EP 528828 A1	March 3, 1993	G	054	C12N009/20
JP 05505939 W	September 2, 1993		018	C12N009/20
EP 528828 B1	June 15, 1994	G	038	C12N009/20
DE 59101948 G	July 21, 1994		000	C12N009/20
ES 2055601 T3	August 16, 1994		000	C12N009/20
US 5427936 A	June 27, 1995		028	C12N009/20
EP 528828 B2	December 3, 1997	G	037	C12N009/20
JP 3112937 B2	November 27, 2000		028	C12N009/20

INT-CL (IPC): C11D 3/38; C11D 3/386; C11D 7/42; C12N 1/20; C12N 1/21; C12N 9/20; C12N 15/09; C12N 15/55; C12R 1/07; C12R 1/07; C12S 11/00; D06L 3/00; D06L 3/02; C12N 1/21; C12R 1/07; C12N 1/21; C12R 1/10; C12N 1/21; C12R 1/125; C12N 9/20; C12R 1/07; C12N 15/09; C12R 1/07

ABSTRACTED-PUB-NO: DE 4111321A

BASIC-ABSTRACT:

New lipases (I), secreted by Bacillus species, have pH optimum in the alkaline range and temp. optimum 30-40 deg C. Also new are (i) DNA sequences (II) encoding a Bacillus lipase having aminoacid sequence at least 70 (90)% homologous with a sequence (A), (2) transformation vectors contg. (II); (3) transformed microorganisms contg. these vectors; and (4) the Bacillus pumilus strains DSM 5776, 5777 and 5778. (A) contains 213 amino acids (including the signal sequence) and is reproduced in the specification together with the encoding DNA sequence (793 bp).

USE/ADVANTAGE - Useful in washing, cleaning, bleaching and dishwashing compsns. used at 30-40 deg C. The compsns. pref. also contain a protease.

ABSTRACTED-PUB-NO:

EP 528828B EQUIVALENT-ABSTRACTS:

New lipases (I), secreted by Bacillus species, have pH optimum in the alkaline range and temp. optimum 30-40 deg C. Also new are (i) DNA sequences (II) encoding a Bacillus lipase having aminoacid sequence at least 70 (90)% homologous with a sequence (A), (2) transformation vectors contg. (II); (3) transformed microorganisms contg. these vectors; and (4) the Bacillus pumilus strains DSM 5776, 5777 and 5778. (A) contains 213 amino acids (including the signal sequence) and is reproduced in the specification together with the encoding DNA sequence (793 bp).

USE/ADVANTAGE - Useful in washing, cleaning, bleaching and dishwashing compsns. used at 30-40 deg C. The compsns. pref. also contain a protease.

US 5427936A

Alkaline bacillus lipases isolated from Bacillus pumilus (DSM 5776, 5777 and/or 5778) cleave triglycerides and fatty esters, with optimum activity in alkaline conditions (pH about 9-10) at 30-40 deg.C. The aminoacid sequences of these enzymes are defined.

USE - The new enzymes are components of improved washing, cleaning and bleaching compsns.

ADVANTAGE - The enzymes are relatively stable at temps. up to about 40 deg.C.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMTC

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Terms	Documents
lipase same bacillus same pumilus	80

Display Format: [Change Format](#)

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WEST[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 20 of 38 returned.** **1. Document ID: US 20030180933 A1**

L3: Entry 1 of 38

File: PGPB

Sep 25, 2003

PGPUB-DOCUMENT-NUMBER: 20030180933
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030180933 A1

TITLE: Protease variants and compositions

PUBLICATION-DATE: September 25, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hansen, Peter Kamp	Lejre		DK	
Bauditz, Peter	Kobenhavn O		DK	
Mikkelsen, Frank	Valby		DK	

US-CL-CURRENT: [435/222](#); [435/252.31](#), [435/320.1](#), [435/69.1](#), [510/320](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

 2. Document ID: US 20030176304 A1

L3: Entry 2 of 38

File: PGPB

Sep 18, 2003

PGPUB-DOCUMENT-NUMBER: 20030176304
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030176304 A1

TITLE: Protease variants and compositions

PUBLICATION-DATE: September 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hansen, Peter Kamp	Lejre		DK	
Bauditz, Peter	Soborg		DK	
Mikkelsen, Frank	Valby		DK	
Andersen, Kim Vilbour	Copenhagen O		DK	

US-CL-CURRENT: [510/226](#); [435/222](#), [435/252.31](#), [435/320.1](#), [435/69.1](#), [510/320](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

□ 3. Document ID: US 20030171235 A1

L3: Entry 3 of 38

File: PGPB

Sep 11, 2003

PGPUB-DOCUMENT-NUMBER: 20030171235
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20030171235 A1

TITLE: Subtilase enzymes

PUBLICATION-DATE: September 11, 2003

INVENTOR- INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hansen, Peter Kamp	Lejre		DK	
Bauditz, Peter	Kobenhaven O		DK	
Mikkelsen, Frank	Valby		DK	
Andersen, Kim Vilbour	Copenhagen O		DK	
Andersen, Carsten	Vaerlose		DK	
Norregaard-Madsen, Mads	Odense M		DK	

US-CL-CURRENT: 510/226; 435/222, 435/252.3, 435/320.1, 435/69.1, 510/320, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw	Desc	Image								

□ 4. Document ID: US 20030170696 A1

L3: Entry 4 of 38

File: PGPB

Sep 11, 2003

PGPUB-DOCUMENT-NUMBER: 20030170696
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20030170696 A1

TITLE: Cgtase and dna sequence encoding same

PUBLICATION-DATE: September 11, 2003

INVENTOR- INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Jorgensen, Per Lina	Kobenhavn K		DK	
Fuglsang, Claus Crone	Vekso		DK	

US-CL-CURRENT: 435/6; 426/20, 435/193, 435/320.1, 435/325, 435/69.1, 435/97, 510/320,
536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw	Desc	Image								

□ 5. Document ID: US 20030148441 A1

L3: Entry 5 of 38

File: PGPB

Aug 7, 2003

PGPUB-DOCUMENT-NUMBER: 20030148441
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20030148441 A1

TITLE: Method for preparing polypeptide variants

PUBLICATION-DATE: August 7, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Okkels, Jens Sigurd	Tokyo		JP	

US-CL-CURRENT: 435/69.1; 435/320.1, 435/325, 435/455

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

6. Document ID: US 20030129707 A1

L3: Entry 6 of 38

File: PGPB

Jul 10, 2003

PGPUB-DOCUMENT-NUMBER: 20030129707

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030129707 A1

TITLE: Crystal harvest from fermentation broth

PUBLICATION-DATE: July 10, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Nielsen, Benny	Gislinge		DK	
Rancke-Madsen, Anders	Charlottenlund		DK	
Jorgensen, Martin Troen	Roskilde		DK	

US-CL-CURRENT: 435/71.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

7. Document ID: US 20030096390 A1

L3: Entry 7 of 38

File: PGPB

May 22, 2003

PGPUB-DOCUMENT-NUMBER: 20030096390

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030096390 A1

TITLE: Novel lipase genes

PUBLICATION-DATE: May 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Giver, Lorraine J.	Santa Clara	CA	US	
Minshull, Jeremy	Menlo Park	CA	US	
Vogel, Kurt	Palo Alto	CA	US	

US-CL-CURRENT: 435/198; 435/135, 435/320.1, 435/325, 435/69.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMC

□ 8. Document ID: US 20030092097 A1

L3: Entry 8 of 38

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030092097
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030092097 A1

TITLE: CELLULASE VARIANTS

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
ANDERSEN, KIM VILBOUR	COPENHAGEN		DK	
SCHULEIN, MARTIN	COPENHAGEN		DK	
CHRISTIANSEN, LARS	VIRUM		DK	
DAMGAARD, BO	LAUSANNE		CH	
VON DER OSTEN, CLAUS	LYNGBY		DK	

US-CL-CURRENT: 435/69.1; 435/195, 435/200

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMC

□ 9. Document ID: US 20030091691 A1

L3: Entry 9 of 38

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030091691
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030091691 A1

TITLE: Stepping process

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Olsen, Hans Sejr	Holte		DK	
Nielsen, Bjarne Ronfeldt	Virum		DK	

US-CL-CURRENT: 426/49

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMC

□ 10. Document ID: US 20030087415 A1

L3: Entry 10 of 38

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087415
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030087415 A1

TITLE: Extracellular expression of pectate lyase using *Bacillus* or *Escherichia coli*

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Andersen, Jens Toenne	Naerum	CA	DK	
Kongsbak, Lars	Holte		DK	
Schulein, Martin	Davis		US	
Bjornvad, Mads Eskelund	Frederiksberg		DK	

US-CL-CURRENT: 435/232; 435/252.31, 435/320.1, 435/69.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							KMC

11. Document ID: US 20030046773 A1

L3: Entry 11 of 38

File: PGPB

Mar 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030046773
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030046773 A1

TITLE: Preparation of cellulosic materials

PUBLICATION-DATE: March 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Xu, Hui	Wake Forest	NC	US	
Liu, Jiyin	Raleigh	NC	US	
Otto, Eric	St. Louisburg	NC	US	
Condon, Brian	Wake Forest	NC	US	

US-CL-CURRENT: 8/115.51; 8/101

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							KMC

12. Document ID: US 20030041387 A1

L3: Entry 12 of 38

File: PGPB

Mar 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030041387
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030041387 A1

TITLE: Single-bath preparation of cellulosic materials

PUBLICATION-DATE: March 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Xu, Hui	Wake Forest	NC	US	
Liu, Jiyin	Raleigh	NC	US	
Otto, Eric	St. Louisburg	NC	US	
Condon, Brian	Wake Forest	NC	US	

US-CL-CURRENT: 8/115.51

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

 13. Document ID: US 20030032162 A1

L3: Entry 13 of 38

File: PGPB

Feb 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030032162
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20030032162 A1

TITLE: Family 44 xyloglucanases

PUBLICATION-DATE: February 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Schnorr, Kirk	Holte	CA	DK	
Jorgensen, Per Lina	Copenhagen		DK	
Schulein, Martin	Davis		US	

US-CL-CURRENT: 435/200; 435/252.3, 435/320.1, 435/69.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

 14. Document ID: US 20030022807 A1

L3: Entry 14 of 38

File: PGPB

Jan 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030022807
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20030022807 A1

TITLE: Family 5 xyloglucanases

PUBLICATION-DATE: January 30, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Wilting, Reinhart	Farum		DK	
Bjornvad, Mads Eskelund	Frederiksberg		DK	
Kauppinen, Markus Sakari	Smorum		DK	
Schulein, Martin	Copenhagen		DK	
Dela, Hanne	Copenhagen		DK	

US-CL-CURRENT: 510/392

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KMC				

15. Document ID: US 20020192792 A1

L3: Entry 15 of 38

File: PGPB

Dec 19, 2002

PGPUB-DOCUMENT-NUMBER: 20020192792
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020192792 A1

TITLE: Laccase mutants

PUBLICATION-DATE: December 19, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Schneider, Palle	Ballerup		DK	
Danielsen, Steffen	Copenhagen		DK	
Svendsen, Allan	Hoersholm		DK	

US-CL-CURRENT: 435/200; 435/320.1, 435/325, 435/69.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KMC				

16. Document ID: US 20020183506 A1

L3: Entry 16 of 38

File: PGPB

Dec 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020183506
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020183506 A1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

PUBLICATION-DATE: December 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Danielsen, Steffen	Copenhagen		DK	
Schneider, Palle	Ballerup		DK	

US-CL-CURRENT: 536/23.2; 435/189, 435/320.1, 435/325, 435/69.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc Image					KMC				

17. Document ID: US 20020178509 A1

L3: Entry 17 of 38

File: PGPB

Dec 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020178509
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020178509 A1

TITLE: Reduction of malodor from laundry

PUBLICATION-DATE: December 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Johansen, Charlotte	Holte		DK	
Munk, Signe	Copenhagen K		DK	

US-CL-CURRENT: 8/137; 510/392

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

18. Document ID: US 20020155575 A1

L3: Entry 18 of 38

File: PGPB

Oct 24, 2002

PGPUB-DOCUMENT-NUMBER: 20020155575
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020155575 A1

TITLE: Subtilase variants

PUBLICATION-DATE: October 24, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Norregaard-Madsen, Mads	Birkerod		DK	
Larsen, Line Bloch	Haspegardsvej		DK	
Hansen, Peter Kamp	Lejre		DK	

US-CL-CURRENT: 435/222; 435/252.3, 435/320.1, 435/69.1, 510/306, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

19. Document ID: US 20020137655 A1

L3: Entry 19 of 38

File: PGPB

Sep 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020137655
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020137655 A1

TITLE: Use of haloperoxidase, peroxide and carboxylic acid

PUBLICATION-DATE: September 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Johansen, Charlotte	Holte		DK	
Nielsen, Michael Skovgaard	Copenhagen O		DK	
Schneider, Palle	Ballerup		DK	
Johansen, Jeanette Theil	Vaerloese		DK	

US-CL-CURRENT: 510/392; 510/305

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
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20. Document ID: US 20020119136 A1

L3: Entry 20 of 38

File: PGPB

Aug 29, 2002

PGPUB-DOCUMENT-NUMBER: 20020119136

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020119136 A1

TITLE: Antimicrobial peroxidase compositions

PUBLICATION-DATE: August 29, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Johansen, Charlotte	Holte		DK	

US-CL-CURRENT: 424/94.4; 424/195.15, 424/616

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
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Terms	Documents
lipase same bacillus same pumilus	38

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L3: Entry 21 of 38

File: PGPB

Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020115194
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020115194 A1

TITLE: Biopreparation of textiles at high temperatures

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lange, Niel Erik Krebs	Raleigh	NC	US	
Kongsbak, Lars	Holte	NC	DK	
Shulein, Martin	Copenhagen		DK	
Bjornvad, Mads Eskelund	Frederiksberg		DK	
Husain, Philip Anwar	Wake Forest		US	

US-CL-CURRENT: 435/263

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

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 22. Document ID: US 20020110620 A1

L3: Entry 22 of 38

File: PGPB

Aug 15, 2002

PGPUB-DOCUMENT-NUMBER: 20020110620
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020110620 A1

TITLE: Particles containing active in visco-elastic liquids

PUBLICATION-DATE: August 15, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Bach, Poul	Birkerod		DK	

US-CL-CURRENT: 426/62; 427/213, 427/242, 428/403, 510/392

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMC

□ 23. Document ID: US 20020106511 A1

L3: Entry 23 of 38

File: PGPB

Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020106511

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020106511 A1

TITLE: Encapsulation of compounds in vesicles

PUBLICATION-DATE: August 8, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Callisen, Thomas Honger	Frederiksberg C	DK		

US-CL-CURRENT: 428/402.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw	Desc	Image								

□ 24. Document ID: US 20020102702 A1

L3: Entry 24 of 38

File: PGPB

Aug 1, 2002

PGPUB-DOCUMENT-NUMBER: 20020102702

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020102702 A1

TITLE: Protease variants and compositions

PUBLICATION-DATE: August 1, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Osten, Claus von der	Lyngby	DK		
Halkier, Torben	Birkerod	DK		
Andersen, Carsten	Vaerloese	DK		
Bauditz, Peter	Copenhagen	DK		
Hansen, Peter Kamp	Lejre	DK		

US-CL-CURRENT: 435/222; 435/252.3, 435/320.1, 435/69.1, 510/226, 510/305, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw	Desc	Image								

□ 25. Document ID: US 20020102246 A1

L3: Entry 25 of 38

File: PGPB

Aug 1, 2002

PGPUB-DOCUMENT-NUMBER: 20020102246

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020102246 A1

TITLE: Antimicrobial compositions

PUBLICATION-DATE: August 1, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Schneider, Palle	Lynge		DK	
Moller, Soren	Holte		DK	
Biedermann, Kirsten	Horsholm		DK	
Johansen, Charlotte	Holte		DK	

US-CL-CURRENT: 424/94.4; 424/401, 510/320

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc Image										

 26. Document ID: US 20020094331 A1

L3: Entry 26 of 38

File: PGPB

Jul 18, 2002

PGPUB-DOCUMENT-NUMBER: 20020094331
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20020094331 A1

TITLE: ANTIMICROBIAL COMPOSITION CONTAINING AN OXIDOREDUCTASE AND AN ENHANCER OF THER N-HYDROXYANILIDE-TYPE

PUBLICATION-DATE: July 18, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
JOHANSEN, CHARLOTTE	HOLTE		DK	
DEUSSEN, HEINZ-JOSEF	SOEBORG		DK	

US-CL-CURRENT: 424/94.4; 435/405

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc Image										

 27. Document ID: US 20020081738 A1

L3: Entry 27 of 38

File: PGPB

Jun 27, 2002

PGPUB-DOCUMENT-NUMBER: 20020081738
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20020081738 A1

TITLE: Coated particles containing an active

PUBLICATION-DATE: June 27, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Simonsen, Ole	Soborg		DK	
Bach, Poul	Birkerod		DK	

US-CL-CURRENT: 435/459; 424/9.52

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

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□ 28. Document ID: US 20020076790 A1

L3: Entry 28 of 38

File: PGPB

Jun 20, 2002

PGPUB-DOCUMENT-NUMBER: 20020076790
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020076790 A1

TITLE: 2,6-beta-D-fructan hydrolase enzyme and processes for using the enzyme

PUBLICATION-DATE: June 20, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Moller, Soren	Holte		DK	
Johansen, Charlotte	Holte		DK	
Schafer, Thomas	Farum		DK	
Ostergaard, Peter Rahbek	Virum		DK	
Hoeck, Lisbeth Hedegaard	Skodsborg		DK	

US-CL-CURRENT: 435/200; 435/101, 435/320.1, 435/325, 435/69.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

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□ 29. Document ID: US 20020072086 A1

L3: Entry 29 of 38

File: PGPB

Jun 13, 2002

PGPUB-DOCUMENT-NUMBER: 20020072086
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020072086 A1

TITLE: POLYPEPTIDES HAVING HALOPEROXIDASE ACTIVITY

PUBLICATION-DATE: June 13, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Danielsen, Steffen	Copenhagen		DK	
Schneider, Palle	Ballerup		DK	

US-CL-CURRENT: 435/41; 435/189, 435/69.1, 510/320

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMC

□ 30. Document ID: US 20020066144 A1

L3: Entry 30 of 38

File: PGPB

Jun 6, 2002

PGPUB-DOCUMENT-NUMBER: 20020066144
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020066144 A1

TITLE: Redeposition or backstain inhibition during stonewashing process

PUBLICATION-DATE: June 6, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Uyama, Naoto	Chiba-prefecture		JP	
Daimon, Kosaku	Chiba-ken		JP	

US-CL-CURRENT: 8/115.51

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw	Desc	Image								

31. Document ID: US 20020058320 A1

L3: Entry 31 of 38

File: PGPB

May 16, 2002

PGPUB-DOCUMENT-NUMBER: 20020058320
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020058320 A1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

PUBLICATION-DATE: May 16, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Danielsen, Steffen	Copenhagen		DK	
Schneider, Palle	Ballerup		DK	

US-CL-CURRENT: 435/189; 435/320.1, 435/325, 435/69.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw	Desc	Image								

32. Document ID: US 20020028754 A1

L3: Entry 32 of 38

File: PGPB

Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020028754
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020028754 A1

TITLE: Antimicrobial compositions

PUBLICATION-DATE: March 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Johansen, Charlotte	Holte		DK	
Aaslyng, Dorrit	Vaerlose		DK	

US-CL-CURRENT: [510/302](#); [510/205](#), [510/309](#), [510/392](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw		Desc	Image							

33. Document ID: US 20020020668 A1

L3: Entry 33 of 38

File: PGPB

Feb 21, 2002

PGPUB-DOCUMENT-NUMBER: 20020020668

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020020668 A1

TITLE: Microfiltration using activated carbon

PUBLICATION-DATE: February 21, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Laustsen, Mads Aage	Lyngby		DK	
Nielsen, Soren Bo	Vaerlose		DK	
Jakobsen, Sune	Vaerlose		DK	
Hansen, Kim Uhre	Kalundborg		DK	

US-CL-CURRENT: [210/639](#); [210/650](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw		Desc	Image							

34. Document ID: US 20020009435 A1

L3: Entry 34 of 38

File: PGPB

Jan 24, 2002

PGPUB-DOCUMENT-NUMBER: 20020009435

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020009435 A1

TITLE: Polypeptides having haloperoxidase activity

PUBLICATION-DATE: January 24, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Schneider, Palle	Lynge		DK	
Danielsen, Steffen	Copenhagen O		DK	

US-CL-CURRENT: [424/94.4](#); [435/189](#), [435/325](#), [435/69.1](#), [510/226](#), [510/300](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw		Desc	Image							

35. Document ID: US 20020009434 A1

L3: Entry 35 of 38

File: PGPB

Jan 24, 2002

PGPUB-DOCUMENT-NUMBER: 20020009434
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020009434 A1

TITLE: Polypeptides having haloperoxidase activity

PUBLICATION-DATE: January 24, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Danielsen, Steffen	Copenhagen		DK	
Schneider, Palle	Ballerup		DK	

US-CL-CURRENT: 424/94.4; 435/189, 510/226, 510/320

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Drawn Desc	Image									

36. Document ID: US 20020007052 A1

L3: Entry 36 of 38

File: PGPB

Jan 17, 2002

PGPUB-DOCUMENT-NUMBER: 20020007052
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020007052 A1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

PUBLICATION-DATE: January 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Schneider, Palle	Lynge		DK	
Danielsen, Steffen	Copenhagen O		DK	

US-CL-CURRENT: 536/23.2; 435/189, 435/325, 435/69.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Drawn Desc	Image									

37. Document ID: US 20020006652 A1

L3: Entry 37 of 38

File: PGPB

Jan 17, 2002

PGPUB-DOCUMENT-NUMBER: 20020006652
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020006652 A1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

PUBLICATION-DATE: January 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Danielsen, Steffen	Copenhagen O		DK	
Schneider, Palle	Ballerup		DK	

US-CL-CURRENT: [435/189](#); [435/325](#), [435/69.1](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

38. Document ID: US 20010025018 A1

L3: Entry 38 of 38

File: PGPB

Sep 27, 2001

PGPUB-DOCUMENT-NUMBER: 20010025018
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20010025018 A1

TITLE: Antimicrobial activity of laccases

PUBLICATION-DATE: September 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Johansen, Charlotte	Holte		DK	
Pedersen, Anders Hjelholt	Lyngby		DK	
Fuglsang, Claus Crone	Nivaas		DK	

US-CL-CURRENT: [510/305](#); [510/306](#), [510/392](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

[Generate Collection](#)[Print](#)

Terms	Documents
lipase same bacillus same pumilus	38

Display Format: [CIT](#) [Change Format](#)

[Previous Page](#) [Next Page](#)

STN SEARCH

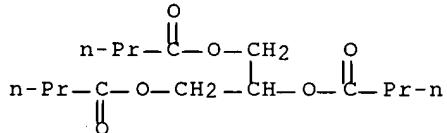
09/905,666

9/26/03

=> file reg
=> s tributyrin/cn
L1 1 TRIBUTYRIN/CN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN 60-01-5 REGISTRY
CN Butanoic acid, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Butyrin, tri- (6CI, 8CI)
OTHER NAMES:
CN Butyrin
CN Butyryl triglyceride
CN Glycerin tributyrate
CN Glycerol tributanoate
CN Glycerol tributyrate
CN Glyceroltributyrin
CN Glyceryl tributanoate
CN Glyceryl tributyrate
CN NSC 661583
CN Tri-n-butyryl
CN Tributin
CN **Tributyrin**
CN Tributyrin
CN Tributyrin
CN Tributyrin
CN Tributyrin
FS 3D CONCORD
MF C15 H26 O6
CI COM



=> s nerylbutyrate/cn
L2 0 NERYLBUTRYLATE/CN

=> s nerylbutyrate/cn
L3 0 NERYLBUTRYATE/CN

=> s neryl-butryate/cn
L4 0 NERYL-BUTRYATE/CN

=> s geranylbutrate/cn
L5 0 GERANYLBUTRATE/CN

=> s geranyl-butrate/cn
L6 0 GERANYL-BUTRATE/CN

=> s nerylol/cn
L7 0 NERYLOL/CN

=> s neryl alchol/cn
L8 0 NERYL ALCHOL/CN

=> s geranol/cn
L9 1 GERANOL/CN

=> d

L9 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN 163063-26-1 REGISTRY
CN **Geranol (9CI)** (CA INDEX NAME)
ENTE A plant extract similar to rosanol (Russia)

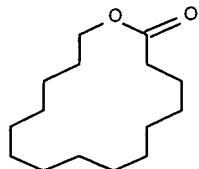
MF Unspecified
CI MAN
SR CA
LC STN Files: AQUIRE, CA, CAPLUS, TOXCENTER

*** STRUCTURE DIAGRAM IS NOT AVAILABLE
4 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s pentadecanolide/cn
L10 1 PENTADECANOLIDE/CN

=> d

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN 106-02-5 REGISTRY
CN Oxacyclohexadecan-2-one (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pentadecanoic acid, 15-hydroxy-, .xi.-lactone (6CI, 7CI)
OTHER NAMES:
CN 1,15-Pentadecanolide
CN 1-Oxacyclohexadecan-2-one
CN 15-Hydroxypentadecanoic acid lactone
CN 15-Pentadecanolide
CN 2-Pentadecalone
CN cpd Supra
CN CPE 215
CN Cyclopentadecanolide
CN Exaltolide
CN Muskalactone
CN NSC 36763
CN Pentadecalactone
CN Pentadecanolactone
CN **Pentadecanolide**
CN Pentalide
CN Thibetolide
FS 3D CONCORD
DR 81031-90-5
MF C15 H28 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA,
CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSChem,
DETERM*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, MSDS-OHS,
NAPRALERT, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



=> s oxacyclotridecan/cn
L11 0 OXACYCLOTRIDECAN/CN

=> file .nash
=> s lipase and bacillus
L12 201 FILE MEDLINE
L13 992 FILE CAPLUS
L14 316 FILE SCISEARCH
L15 152 FILE LIFESCI
L16 545 FILE BIOSIS

L17 182 FILE EMBASE

TOTAL FOR ALL FILES
L18 2388 LIPASE AND BACILLUS

=> s l18 and pumilus
TOTAL FOR ALL FILES
L25 82 L18 AND PUMILUS

=> s l25 not 2002-2003/py
L40 3 FILE MEDLINE
L41 24 FILE CAPLUS
L42 8 FILE SCISEARCH
L43 9 FILE LIFESCI
L44 15 FILE BIOSIS
L45 3 FILE EMBASE

TOTAL FOR ALL FILES
L46 62 L25 NOT 2002-2003/PY

=> dup rem 146
PROCESSING COMPLETED FOR L46
L47 32 DUP REM L46 (30 DUPLICATES REMOVED)

=> d ibib abs 1-32

L47 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:57144 CAPLUS
DOCUMENT NUMBER: 134:97749
TITLE: Enzyme producing strain of **Bacillus**
INVENTOR(S): Lawler, David; Smith, Steven
PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6177012	B1	20010123	US 1999-291053	19990414
PRIORITY APPLN. INFO.: US 1999-291053 19990414				
AB This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.				
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L47 ANSWER 2 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:43465 CAPLUS
DOCUMENT NUMBER: 134:83365
TITLE: Enzyme-producing strain of **Bacillus** bacteria
INVENTOR(S): Lawler, David; Smith, Steven
PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA
SOURCE: U.S., 11 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6174718	B1	20010116	US 1999-291057	19990414
PRIORITY APPLN. INFO.: US 1999-291057 19990414				
AB This invention presents a newly discovered, novel strain of				

Bacillus bacteria that produces **lipase** enzymes for the degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others. Thus, *Paenibacillus macerans* ATCC 202135 was shown to produce lipolytic, amylolytic, and proteolytic activities by producing zones of clearing on plate diffusion tests.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 3 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:25709 CAPLUS
DOCUMENT NUMBER: 134:83362
TITLE: Enzyme-producing strain of **Bacillus** bacteria
INVENTOR(S): Lawler, David; Smith, Steven
PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA
SOURCE: U.S., 11 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6171848	B1	20010109	US 1999-291056	19990414
PRIORITY APPLN. INFO.: US 1999-291056 19990414				

AB This invention presents a newly discovered, novel strain of **Bacillus** bacteria that produces **lipase** enzymes for the degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others. Thus, *Bacillus amyloliquefaciens* ATCC 202133 was shown to produce lipolytic, amylolytic, and proteolytic activities by producing zones of clearing on plate diffusion tests.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 4 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:25708 CAPLUS
DOCUMENT NUMBER: 134:83361
TITLE: Enzyme-producing strain of **Bacillus** bacteria
INVENTOR(S): Lawler, David; Smith, Steven
PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6171847	B1	20010109	US 1999-291055	19990414
PRIORITY APPLN. INFO.: US 1999-291055 19990414				

AB This invention presents a newly discovered, novel strain of **Bacillus** bacteria that produces **lipase** enzymes for the degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others. Thus, *Bacillus amyloliquefaciens* ATCC 202134 was shown to produce lipolytic, amylolytic, and proteolytic activities by producing zones of clearing on plate diffusion tests.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 5 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2001:315330 CAPLUS
DOCUMENT NUMBER: 135:269120
TITLE: Over-expression and properties of a purified recombinant **Bacillus** licheniformis **lipase**: a comparative report on **Bacillus** **lipases**
AUTHOR(S): Nthangeni, M. B.; Patterson, H.-G.; van Tonder, A.; Vergeer, W. P.; Litthauer, D.
CORPORATE SOURCE: Department of Microbiology and Biochemistry, University of the Free State, Bloemfontein, 9300, S. Afr.
SOURCE: Enzyme and Microbial Technology (2001), 28(7-8), 705-712
CODEN: EMTED2; ISSN: 0141-0229
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The gene coding for an extracellular **lipase** of **Bacillus** licheniformis was cloned using PCR techniques. The sequence corresponding to the mature **lipase** was subcloned into the pET 20b(+) expression vector to construct a recombinant **lipase** protein contg. 6 histidine residues at the C-terminal. High-level expression of the **lipase** by *Escherichia coli* cells harboring the **lipase** gene-contg. expression vector was obsd. upon induction with IPTG at 30.degree.. A one step purifn. of the recombinant **lipase** was achieved with Ni-NTA resin. The specific activity of the purified enzyme was 130 units/mg with p-nitrophenyl-palmitate as substrate. The enzyme showed max. activity at pH 10-11.5 and was remarkably stable at alk. pH values up to 12. The enzyme was active toward p-nitrophenyl esters of short to long chains fatty acids but with a marked preference for esters with C6 and C8 acyl groups. The amino acid sequence of the **lipase** shows striking similarities to **lipases** from **Bacillus** subtilis and **Bacillus** pumilus. Based on the amino acid identity and biochem. characteristics, we propose that **Bacillus** **lipases** be classified into two distinct subfamilies of their own.
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:455510 CAPLUS
DOCUMENT NUMBER: 135:192773
TITLE: Characterization of bacteriocin N15 produced by *Enterococcus faecium* N15 and cloning of the related genes
AUTHOR(S): Losteinkit, Chanvadhee; Uchiyama, Keiji; Ochi, Shuichiro; Takaoka, Tomoyo; Nagahisa, Keisuke; Shioya, Suteaki
CORPORATE SOURCE: Department of Biotechnology, Graduate School of Engineering, Osaka University, Suita, 565-0871, Japan
SOURCE: Journal of Bioscience and Bioengineering (2001), 91(4), 390-395
CODEN: JBBIF6; ISSN: 1389-1723
PUBLISHER: Society for Bioscience and Bioengineering, Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
AB *Enterococcus faecium* N15 was isolated from nuka (Japanese rice-bran paste), which is utilized as starter in the fermenting of vegetables, and was found to produce a bacteriocin that exhibited a broad spectrum of activity, including activity against *Listeria monocytogenes* and **Bacillus** circulans JCM2504. The bacteriocin was sensitive to proteases (.alpha.-chymotrypsin, proteinase K, trypsin, and pepsin) and .alpha.-amylase, but it was resistant to **lipase**. The bacteriocin was resistant to heat treatment at 100.degree.C for 2 h, but its activity was completely lost after autoclaving at 121.degree.C for 15 min. It was active over a wide pH range from 2.0 to 10.0. The bacteriocin showed bactericidal activity against *Lactobacillus sake* JCM1157 at a concn. of 40 AU/mL. Its mol. wt. was estd. by SDS-PAGE to be about 3-5 kDa. PCR primers were designed based on the conserved amino

acid sequences of class IIa bacteriocins. A 3-kb DNA fragment was amplified and three open reading frames (ORFs) were found. The first encodes a probable immunity protein of 103 amino acid residues and shows complete homol. with the putative immunity protein of *E. faecium* DPC1146. The second and third ORFs resp. encode a probable transposase gene and an inducing factor. The upstream region of the immunity gene, in which the bacteriocin structural gene is located, was amplified. A homol. search revealed that the bacteriocin produced by *E. faecium* N15 exhibits complete identity to enterocin A, a bacteriocin produced by *E. faecium* DPC1146. PCR using the primers designed in this study is a rapid and sufficient method of screening for bacteriocin-producing strains.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 7 OF 32 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2001483947 MEDLINE
DOCUMENT NUMBER: 21215562 PubMed ID: 11318507
TITLE: Development of an owoh-type product from African yam beans (*Sphenostylis stenocarpa*) (Hoechst (ex. A. Rich.) Harms.) seeds by solid substrate fermentation.
AUTHOR: Ogbonna D N; Sokari T G; Achinewhu S C
CORPORATE SOURCE: Department of Biological Sciences, Rivers State University of Science and Technology, Nkpolu-Oroworukwo, Port Harcourt, Nigeria.
SOURCE: PLANT FOODS FOR HUMAN NUTRITION, (2001) 56 (2) 183-94.
Journal code: 8803554. ISSN: 0921-9668.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200108
ENTRY DATE: Entered STN: 20010903
Last Updated on STN: 20010903
Entered Medline: 20010830

AB African yam beans were fermented to obtain an owoh-type product. Microorganisms associated with the fermentation were **Bacillus licheniformis**, **B. pumilus**, **B. subtilis** and **Staphylococcus** sp. Total microbial counts increased from $1.53 \times 10(5)$ cfu/g to $1.51 \times 10(9)$ cfu/g under aerobic conditions, and from $8.0 \times 10(3)$ cfu/g to $1.35 \times 10(7)$ cfu/g under conditions of reduced oxygen tension. The pH of the substrate increased throughout the fermentation, from 6.8 to 7.5. A comparison of unfermented seeds with the fermented product showed that there were decreases in the levels of total nitrogen, crude protein, crude fiber and lipids, and that there were increases in the levels of carbohydrate and total organic matter. Enzyme activities during fermentation revealed that amylase production was erratic showing a slight increase during the first 24 h followed by a steep rise in activity in the next 24 h. By contrast, **lipase** activity increased rapidly throughout the first 72 h while proteinase activity followed a type of sigmoid curve with a steady increase in activity within the first 48 h and a relatively high activity until the 96th h before plunging downwards.

L47 ANSWER 8 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:289619 CAPLUS
DOCUMENT NUMBER: 135:43212
TITLE: Partial characterization of polyfermenticin SCD, a newly identified bacteriocin of **Bacillus** polyfermenticus
AUTHOR(S): Lee, K.-H.; Jun, K.-D.; Kim, W.-S.; Paik, H.-D.
CORPORATE SOURCE: Division of Life Sciences, Kyungnam University, Masan, 631-701, S. Korea
SOURCE: Letters in Applied Microbiology (2001), 32(3), 146-151
CODEN: LAMIE7; ISSN: 0266-8254
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Polyfermenticin SCD, a newly identified bacteriocin of **Bacillus** polyfermenticus SCD, was characterized. Polyfermenticin SCD, named tentatively as the bacteriocin produced by *B. polyfermenticus* SCD, showed a narrow spectrum of activity against Gram-pos. and Gram-neg. bacteria, a yeast and molds. Prodn. of polyfermenticin SCD in a 51 jar fermenter

followed typical kinetics of primary metabolite synthesis. The antibacterial activity of polyfermenticin SCD on sensitive indicator cells disappeared completely by treatment with proteinase K, which indicates its proteinaceous nature. Polyfermenticin SCD seemed to be very stable throughout the pH range of 2.0 to 9.0, and it was relatively heat labile compared with other bacteriocins. Direct detection of polyfermenticin SCD activity on SDS-PAGE suggested that it had an apparent mol. mass of about 14.3 kDa. **Bacillus** polyfermenticus SCD produced relatively heat-labile polyfermenticin SCD with a narrow spectrum of activity. **Bacillus** polyfermenticus SCD is a com. probiotic which has been used for the treatment of long-term intestinal disorders. New findings on polyfermenticin SCD will be valuable in the evaluation of com. probiotics. Polyfermenticin SCD can be used to control **Bacillus** spoilage organisms as a biol. control agent.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 9 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2000:454247 CAPLUS

DOCUMENT NUMBER: 133:73017

TITLE: **Lipase-** and protease-producing strain of **Bacillus pumilus** and its uses for wastewater treatment and food processing

INVENTOR(S): Lawler, David; Smith, Steven

PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA

SOURCE: U.S., 11 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6083737	A	20000704	US 1999-291061	19990414

PRIORITY APPLN. INFO.: US 1999-291061 19990414

AB This invention presents a newly discovered, novel strain of **Bacillus** bacteria that produces **lipase** enzymes for the degrdn. of oleaginous materials such as fats, greases and cooking oils, and protease enzymes to degrade proteins. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, animal feed treatment agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 10 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:891510 CAPLUS

DOCUMENT NUMBER: 134:41191

TITLE: Enzyme-producing strain of **Bacillus** bacteria

INVENTOR(S): Lawler, David; Smith, Steven

PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA
SOURCE: U.S., 11 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6162635	A	20001219	US 1999-291060	19990414

PRIORITY APPLN. INFO.: US 1999-291060 19990414

AB This invention presents a newly discovered, novel strain of **Bacillus** bacteria that produces **lipase** enzymes for the degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 11 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:891509 CAPLUS
DOCUMENT NUMBER: 134:41190
TITLE: Enzyme-producing strain of **Bacillus** bacteria
INVENTOR(S): Lawler, David; Smith, Steven
PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA
SOURCE: U.S., 11 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6162634	A	20001219	US 1999-291059	19990414

PRIORITY APPLN. INFO.: US 1999-291059 19990414
AB This invention presents a newly discovered, novel strain of **Bacillus** bacteria that produces **lipase** enzymes for the degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 12 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:769007 CAPLUS
DOCUMENT NUMBER: 133:319479
TITLE: Enzyme-producing strain of **Bacillus subtilis**
INVENTOR(S): Lawler, David; Smith, Steven
PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA
SOURCE: U.S., 11 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English.
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6140106	A	20001031	US 1999-291058	19990414

PRIORITY APPLN. INFO.: US 1999-291058 19990414
AB This invention presents a newly discovered, novel strain of **Bacillus** bacteria that produces **lipase** enzymes for the degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others. Thus, **Bacillus subtilis** strain ATCC 202139 was shown to produce lipolytic, amylolytic, and proteolytic activities by producing zones of clearing on plate diffusion tests.
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 13 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2000:656613 CAPLUS
DOCUMENT NUMBER: 134:146632
TITLE: Microbiological and biochemical changes in the traditional fermentation of soybean for "soy-daddawa". Nigerian food condiment
AUTHOR(S): Omafuvbe, B. O.; Shonukan, O. O.; Abiose, S. H.
CORPORATE SOURCE: Department of Microbiology, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria
SOURCE: Food Microbiology (2000), 17(5), 469-474
CODEN: FOMIE5; ISSN: 0740-0020
PUBLISHER: Academic Press

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB The traditional prodn. of "daddawa" from the fermn. of soybean involves predominantly **Bacillus** species notably *B. subtilis*, *B. licheniformis*, and *B. pumilus*. Although *Micrococcus luteus* and *Staphylococcus epidermidis* were present in relatively low nos. at the onset of fermn., they do not appear to play any major role in the fermn. process. The bacterial population, pH, and moisture content increased with fermn. The titratable acidity increased in the first 24 h and then dropped as fermn. progressed. Amylase activity increased rapidly with fermn. attaining a peak at 48 h with a concomitant decrease in total sol. sugar level while the reducing sugar increased in the first 24 h and dropped. Protease activity also increased rapidly in the first 36 h and dropped giving higher amts. of free amino acids with fermn. **Lipase** and .beta.-fructofuranosidase activities were minimal in the fermenting seeds. (c) 2000 Academic Press.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 14 OF 32 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN DUPLICATE 5

ACCESSION NUMBER: 2000:232357 SCISEARCH

THE GENUINE ARTICLE: 295PX

TITLE: Physiology of dairy-associated **Bacillus** spp.
over a wide pH range

AUTHOR: Lindsay D (Reprint); Brozel V S; Mostert J F; vonHoly A
CORPORATE SOURCE: UNIV WITWATERSRAND, DEPT MOL & CELL BIOL, PRIVATE BAG 3,
ZA-2050 WITWATERSRAND, SOUTH AFRICA (Reprint); UNIV
PRETORIA, DEPT MICROBIOL & PLANT PATHOL, ZA-0001 PRETORIA,
SOUTH AFRICA

COUNTRY OF AUTHOR: SOUTH AFRICA

SOURCE: INTERNATIONAL JOURNAL OF FOOD MICROBIOLOGY, (10 MAR 2000)
Vol. 54, No. 1-2, pp. 49-62.

Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE
AMSTERDAM, NETHERLANDS.

ISSN: 0168-1605.

DOCUMENT TYPE: Article; Journal
FILE SEGMENT: AGRI

LANGUAGE: English

REFERENCE COUNT: 41

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB **Bacillus** species isolated from alkaline wash solutions used for cleaning in place in South African dairy factories have been suggested to contaminate product contact surfaces of dairy processing equipment and result in post-pasteurization spoilage of milk and milk products. Growth and attachment of such **Bacillus** isolates under alkaline and acidic conditions have not been previously described. Therefore, the in vitro growth temperature and pH ranges, attachment abilities and hydrophobicity, and enzyme production capabilities of four **Bacillus** isolates (tentatively identified as *B. subtilis* 115, *B. pumilus* 122 *B. licheniformis* 137 and *B. cereus* 144) previously isolated from the alkaline wash solutions in a South African dairy were examined. Growth pH ranges were determined in buffered Standard One-like Nutrient Broth and in unbuffered 1% Milk Medium at pH values ranging from 3 to 12. Growth and attachment to stainless steel surfaces and production of protease and **lipase** enzymes were determined in 1% Milk Medium at pH 4, 7 and 10. Colony hydrophobicity of each isolate by the Direction of Spreading Method (DOS) was also determined at pH 4, 7 and 10. In addition, Arrhenius plots were used to examine the growth temperature ranges of the isolates. All isolates grew at pH values ranging from 4.5 to 9.5 in buffered Standard One-like Nutrient Broth, and from pH 4 to 10 in 1% Milk Medium. All isolates also attached to stainless steel at pH 3, 7 and 10 in 1% Milk Medium. Generally the attachment of *B. subtilis* 115, *B. pumilus* 122 and *B. licheniformis* 137 to stainless steel surfaces was enhanced at pH 1 and 10, compared to pH 7. By contrast, the best attachment of *B. cereus* 144 cells to stainless steel surfaces was at pH 7. Planktonic and attached cells of all isolates produced proteolytic enzymes at pH 7 and 10, but not at pH 4. Similarly, planktonic and attached cells of *B. subtilis* 115, *B. pumilus* 122 and *B. licheniformis* 137 produced lipolytic enzymes at pH 7 and 10, and weak lipolysis was observed at pH 4. The **Bacillus** cereus 144 isolate showed no lipolytic activity at pH 10. All isolates exhibited low hydrophobic properties at

all pH values even though attachment to stainless steel at the same pH values occurred. None of the isolates grew below 11 degrees C or above 56 degrees C, and optimum growth temperatures were in the high mesophilic range (36-44 degrees C). (C) 2000 Elsevier Science B.V. All rights reserved.

L47 ANSWER 15 OF 32 LIFESCI COPYRIGHT 2003 CSA on STN
ACCESSION NUMBER: 2001:35645 LIFESCI
TITLE: Enzyme-producing strain of **Bacillus pumilus**
AUTHOR: Lawler, D.; Smith, S.
CORPORATE SOURCE: Roebic Laboratories, Inc.
SOURCE: (20000704) . US Patent: 6083737; US CLASS: 435/252.5; 210/601; 210/602; 426/2; 426/442; 426/807; 435/252.4; 435/262.5; 435/832.
DOCUMENT TYPE: Patent
FILE SEGMENT: W2
LANGUAGE: English
SUMMARY LANGUAGE: English
AB This invention presents a newly discovered, novel strain of **Bacillus** bacteria that produces **lipase** enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, and protease enzymes to degrade proteins. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

L47 ANSWER 16 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:384075 CAPLUS
DOCUMENT NUMBER: 131:22909
TITLE: Degradation of biodegradable polymers with bacteria or bacterial enzymes
INVENTOR(S): Koch, Rainhard; Wiegand, Simone
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19754063	A1	19990610	DE 1997-19754063	19971205
WO 9929885	A1	19990617	WO 1998-EP7610	19981125
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9918755	A1	19990628	AU 1999-18755	19981125
PRIORITY APPLN. INFO.:			DE 1997-19754063	19971205
			WO 1998-EP7610	19981125

AB The use of *Paenibacillus lautus*, **Bacillus pumilus**, *Aeromicrobium*, *Thermobispora bispora*, *Brevibacillus*, and **Bacillus** or esterases, **lipases**, and oligoamidases from these bacteria to degrade biodegradable polymers is disclosed. The biodegradable polymers are aliph. or partially arom. polyesters, thermoplastic aliph. or partially arom. polyetherurethanes, aliph./arom. polyestercarbonates, or aliph. or partially arom. polyesteramides. The degrdn. of granules of a polyesteramide composed of 60 wt.% caprolactam and 40 wt.% adipic acid-butanediol ester with *Thermobispora bispora* and *Aeromicrobium* was demonstrated.

L47 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 2000:34126 CAPLUS
DOCUMENT NUMBER: 132:133961
TITLE: Purification and characterization of an extracellular

lipase from a newly isolated thermophilic
Bacillus pumilus
 AUTHOR(S): Jose, Joyce; Kurup, G. Muraleedhara
 CORPORATE SOURCE: School of Biosciences, Mahatma Gandhi University,
 Kottayam, 686 560, India
 SOURCE: Indian Journal of Experimental Biology (1999), 37(12),
 1213-1217
 CODEN: IJEBA6; ISSN: 0019-5189
 PUBLISHER: National Institute of Science Communication, CSIR
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB An extracellular **lipase** was isolated and purified from **B. pumilus**. This was the 1st **lipase** isolated from this organism. The effects of temp., pH, and compn. of the culture medium were optimized for max. **lipase** prodn. The enzyme was purified, and the purity was found to be 98%. The Km of the enzyme was 1.75 .times. 10-2 mg. and the enzyme was found to be a monomer by SDS-PAGE. This **lipase** was found to be alk. and thermostable and was not a metalloprotein as evidenced from EDTA treatment. Immobilized whole cells were found to be more stable than the pure enzyme.
 REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 18 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 7
 ACCESSION NUMBER: 1999:367610 CAPLUS
 DOCUMENT NUMBER: 131:181510
 TITLE: Molecular characterisation of the gene encoding an esterase from **Bacillus licheniformis** sharing significant similarities with **lipases**
 AUTHOR(S): Alvarez-Macarie, E.; Augier-Magro, V.; Guzzo, J.; Baratti, J.
 CORPORATE SOURCE: Biocatalysis and Fine Chemistry group, CNRS ESA 6111, Faculte des Sciences de Luminy, Marseille, 13288, Fr.
 SOURCE: Biotechnology Letters (1999), 21(4), 313-319
 CODEN: BILED3; ISSN: 0141-5492
 PUBLISHER: Kluwer Academic Publishers
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB An esterase gene from the moderate thermophilic strain **Bacillus licheniformis** LCB40 was cloned and expressed in *Escherichia coli*. Comparison of the amino acid sequence of the esterase with those of known **lipases** and esterases showed the presence of the well-conserved Gly-X-Ser-X-Gly pentapeptide, with an alanine replacing the first glycine. This substitution has never been reported for an esterase but it is present in the **lipases** from **Bacillus subtilis**, **Bacillus pumilus** and *Galactomyces candidum*. The amino acid sequence showed similarities with **lipases** and with mammalian lecithin-cholesterol acyltransferases and no similarities with esterases. The enzyme activity of a crude ext. from a recombinant *Escherichia coli* strain showed hydrolysis of p-nitrophenyl caprylate (pNPC8) as for esterases, but not of p-nitrophenyl palmitate (pNPC16) or olive oil such as for **lipases**. Thus, the enzyme displays the original property of assocg. the activity of an esterase with a primary sequence showing high similarity with **lipases**.
 REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 19 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 1999:81959 CAPLUS
 DOCUMENT NUMBER: 130:99954
 TITLE: Biological product for treating wastewater
 INVENTOR(S): Knapen, Guy
 PATENT ASSIGNEE(S): Bevil S.P.R.L., Belg.
 SOURCE: Fr. Demande, 9 pp.
 CODEN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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FR 2762835	A3	19981106	FR 1998-7116	19980605
FR 2762835	B3	19991210		

PRIORITY APPLN. INFO.: BE 1997-65 19970122

AB The compn. for treating wastewater in-situ, e.g., in sewers, comprises .gtoreq.1 bacteria, .gtoreq.1 hydrolysis enzyme, and .gtoreq.1 compression agent, and is extruded into small sticks and/or pellets. The forms may also contain nutrients and/or detergents.

L47 ANSWER 20 OF 32 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 2002:20096 BIOSIS

DOCUMENT NUMBER: PREV200200020096

TITLE: Alkaline **bacillus lipases**, coding DNA sequences therefor and **bacilli**, which produce these **lipases**.

AUTHOR(S): Moeller, B.; Vetter, R.; Wilke, D.; Foullois, B.

CORPORATE SOURCE: Hanover Germany

ASSIGNEE: KALI-CHEMIE AKTIENGESELLSCHAFT

PATENT INFORMATION: US 5427936 June 27, 1995

SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (June 27, 1995) Vol. 1175, No. 4, pp. 2473. ISSN: 0098-1133.

DOCUMENT TYPE: Patent

LANGUAGE: English

L47 ANSWER 21 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:909766 CAPLUS

DOCUMENT NUMBER: 123:337920

TITLE: The role of **Bacillus** species in the fermentation of cassava

AUTHOR(S): Amoa-Awua, W.K.A.; Jakobsen, M.

CORPORATE SOURCE: Food Research Institute, Council for Scientific and Industrial Research, Accra, Ghana

SOURCE: Journal of Applied Bacteriology (1995), 79(3), 250-6

CODEN: JABAA4; ISSN: 0021-8847

PUBLISHER: Blackwell

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cassava dough inoculum is added to grated cassava in order to achieve a modification of texture during fermn. into the fermented cassava meal, agbelima. The microflora of two different types of inocula and subsequently inoculated cassava mash at 0, 24, and 48 h of fermn. were examd. in order to det. the mechanism responsible for the breakdown of cassava tissue. **Bacillus** spp. occurred in high nos., 107-108 colony-forming units (cfu)/g, in both types of inocula and persisted throughout the cassava dough fermn. **Bacillus** spp. found were *B. subtilis*, *B. mycoides*, *B. pumilus*, *B. cereus*, *B. amyloliquefaciens*, and *B. licheniformis*, with *B. subtilis* accounting for more than half of **Bacillus** isolates. All **Bacillus** isolates produced a wide spectrum of enzymes and showed similar enzymic activities, but only *B. pumilus*, *B. licheniformis*, and *B. amyloliquefaciens* produced linamarase. Some isolates produced the tissue-degrading enzymes polygalacturonase and pectin esterase and nearly all isolates hydrolyzed starch. All isolates showed cellulase activity and were able to disintegrate cassava tissue. When cassava pieces were incubated in amylase, cellulase, pectin esterase, and polygalacturonase solns., only pieces in cellulase soln. were dissolved revealing that the breakdown of cassava dough texture during fermn. with the inocula examd. is brought about by **Bacillus** spp. through cellulase activity.

L47 ANSWER 22 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 8

ACCESSION NUMBER: 1994:506910 CAPLUS

DOCUMENT NUMBER: 121:106910

TITLE: Microflora and their enzyme profile in "Terasi" starter

AUTHOR(S): Surono, Ingrid S.; Hosono, Akiyoshi

CORPORATE SOURCE: United Graduate Scholl Agricultural Science, Gifu University, Gifu, 501-11, Japan

SOURCE: Bioscience, Biotechnology, and Biochemistry (1994), 58(6), 1167-9

CODEN: BBBIEJ; ISSN: 0916-8451

DOCUMENT TYPE: Journal
LANGUAGE: English
AB Terasi starter was composed of **Bacillus brevis**, **Bacillus pumilus**, **Bacillus megaterium**, **Bacillus coagulans**, **Bacillus subtilis**, and **Micrococcus kristinae** in the proportion of 39.1%, 26.1%, 8.7%, 8.7%, 8.7%, and 8.7%, resp. Most of the isolates showed high esterase (C4) and esterase **lipase** activities (C8).

L47 ANSWER 23 OF 32 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN DUPLICATE 9
ACCESSION NUMBER: 93:489660 SCISEARCH
THE GENUINE ARTICLE: LQ670
TITLE: IDENTIFICATION OF SOME BACTERIA FROM PADDY ANTAGONISTIC TO SEVERAL RICE FUNGAL PATHOGENS
AUTHOR: ROSALES A M (Reprint); VANTOMME R; SWINGS J; DELEY J; MEW T W
CORPORATE SOURCE: INT RICE RES INST, LOS BANOS, PHILIPPINES (Reprint); STATE UNIV GHENT, MICROBIOL MICROBIELE GENET LAB, B-9000 GHENT, BELGIUM
COUNTRY OF AUTHOR: PHILIPPINES; BELGIUM
SOURCE: JOURNAL OF PHYTOPATHOLOGY-PHYTOPATHOLOGISCHE ZEITSCHRIFT, (JUL 1993) Vol. 138, No. 3, pp. 189-208.
ISSN: 0931-1785.

DOCUMENT TYPE: Article; Journal
FILE SEGMENT: AGRI
LANGUAGE: ENGLISH
REFERENCE COUNT: 27
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB The effect of 23 bacterial strains from ricefields in the tropics on rice seed germination and on radicle and hypocotyl development of four rice cultivars was determined. There was a varietal difference in response to seed bacterization with the different bacterial strains. Germination of cv. IR58 increased from 78 to 93 %, that of cv. IR64, from 89 to 97 %. Less effects on germination of cvs IR42 and IR36 were observed. All strains inhibited the mycelial growth of *Rhizoctonia solani* in vitro. The three strains, identified as **Bacillus subtilis**, inhibited the mycelial growth of eight fungal pathogens whereas the other strains were pathogen-specific. Seed bacterization with these bacterial strains provided a sheath blight protection of 4.5 to 73 % in the glasshouse trial. These 23 bacterial strains were identified by phenotypic tests using the API systems, morphological and biochemical features, and by comparison of electrophoretic patterns after sodium dodecyl sulphate polyacrylamide gel electrophoresis. Bacterial strains were identified (number of strains in brackets) as: **Bacillus subtilis** (3), **Bacillus laterosporus** (1), **Bacillus pumilus** (1), *Pseudomonas aeruginosa* (7), *Pseudomonas* belonging to section 1 (5), *Erwina herbicola*-like (1), and *Serratia marcescens* (1). The features of the other four strains were similar to *Serratia* except for the DNAase and **lipase** activities.

L47 ANSWER 24 OF 32 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1993:342203 BIOSIS
DOCUMENT NUMBER: PREV199396039203
TITLE: Studies on thermostable alkaline **lipase** in *Acinetobacter calcoaceticus*.
AUTHOR(S): Shi, Qiaoqin; Chen, Ruoyin; Xu, Qingyi; Wu, Songgang
CORPORATE SOURCE: Inst. Microbiol. Engineering, Fujian Normal Univ., Fuzhou 350007 China
SOURCE: *Acta Microbiologica Sinica*, (1992) Vol. 32, No. 6, pp. 425-431.

DOCUMENT TYPE: Article
LANGUAGE: Chinese
SUMMARY LANGUAGE: Chinese; English
AB A bacteria strain F-1903 was isolated from Fujian province soil, which produced alkaline **lipase** with high activity and high activating temperature. The medium for the strain to produce **lipase** was composed of (%): soy bean meal 2.0, corn-steep liquor 7.0, dextran 1.0, K-2HPO-4 0.5, NaNO-3 0.5. The optimal conditions for **lipase** production were initial pH 7.0, culture temperature 26 degree C for 28h. The enzyme activity is optimal at pH 9.2 and at 54 degree C, which was increased by Ca-2+, while inhibited by EDTA.

L47 ANSWER 25 OF 32 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN DUPLICATE 10

ACCESSION NUMBER: 93:85219 SCISEARCH

THE GENUINE ARTICLE: KK675

TITLE:

OCCURRENCE OF **BACILLUS**-CEREUS AND OTHER
BACILLUS SPECIES IN INDIAN SNACK AND LUNCH FOODS

AND THEIR ABILITY TO GROW IN A RICE PREPARATION

AUTHOR: VARADARAJ M C (Reprint); KESHAVA N; DEVI N; DWARAKANATH C

T; MANJREKAR S P

CORPORATE SOURCE: CENT FOOD TECHNOL RES INST, DISCIPLINE MICROBIOL &
SANITAT, MYSORE 570013, KARNATAKA, INDIA (Reprint)

COUNTRY OF AUTHOR: INDIA

SOURCE: JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE, (NOV/DEC
1992) Vol. 29, No. 6, pp. 344-347.

ISSN: 0022-1155.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: AGRI

LANGUAGE: ENGLISH

REFERENCE COUNT: No References Keyed

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB **Bacillus** brevis, **B.** cereus, **B.** circulans, **B.**

lateralosporus, **B.** licheniformis, **B.** pumilus, **B.**

stearothermophilus and **B.** subtilis were isolated from Indian snack and
lunch foods. Higher count of 4.2 log₁₀ (cfu/g) and a lower count of 2.6
log₁₀ (cfu/g) were observed in bisibele bhath and uppuma, respectively.

The isolated cultures were positive for production of either one or more
of the following: hemolysins, phospholipase, protease, **lipase**
and amylase. A few selected cultures of **Bacillus** species
occurring as post-processing contaminants in plain cooked rice reached
cell populations which were sufficient to cause health hazards. These
findings indicate the significance of **Bacillus** species as
post-processing contaminants in processed foods.

L47 ANSWER 26 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1992:35661 CAPLUS

DOCUMENT NUMBER: 116:35661

TITLE: Alkaline **lipases** from **Bacillus** and
the cloning of their genes

INVENTOR(S): Moeller, Bernhard; Vetter, Roman; Wilke, Detlef;
Foullois, Birgit

PATENT ASSIGNEE(S): Kali-Chemie A.-G., Germany

SOURCE: Ger. Offen., 29 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4111321	A1	19911017	DE 1991-4111321	19910408
WO 9116422	A1	19911031	WO 1991-EP664	19910408
W: JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
EP 528828	A1	19930303	EP 1991-908155	19910408
EP 528828	B1	19940615		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 05505939	T2	19930902	JP 1991-507473	19910408
JP 3112937	B2	20001127		
ES 2055601	T3	19940816	ES 1991-908155	19910408
US 5427936	A	19950627	US 1992-930678	19921013
PRIORITY APPLN. INFO.:			DE 1990-4012070	A1 19900414
			WO 1991-EP664	W 19910408

AB **Lipases** with alk. pH optima that are useful for laundry
detergents are identified in isolates of **Bacillus**
pumilus and the genes cloned for manuf. of the enzyme in a
suitable host. Olive oil-degrading bacteria were isolated from fatty
foods (rancid butter, cheese, or pork fat) and assayed for **lipase**
in plate tests. Three high-level **lipase** secretors were isolated
and found to be novel **B. pumilus**. The **lipase** genes
were cloned by expression in **B. subtilis** with transformants showing

.apprx.50-fold more extracellular **lipase** activity than controls. Introducing the plasmids back into *B. pumilus* resulted in **lipase** yields of 112-224 **lipase** units/mL medium. The enzymes all have a temp. optimum of 30-40.degree., a pH optimum of .apprx.10 and are moderately temp.-stable. In IEC test borate laundry detergents the novel **lipases** removed 43-45.5% of the olive oil in a stain from test swatches. The **lipase** was stable in the presence of alk. proteinases used in detergents.

L47 ANSWER 27 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 11
ACCESSION NUMBER: 1991:20708 CAPLUS
DOCUMENT NUMBER: 114:20708
TITLE: Enzymic activity of **bacilli** perspective for inclusion into composition of biopreparation
AUTHOR(S): Slabospitskaya, A. T.; Krymovskaya, S. S.; Reznik, S. R.
CORPORATE SOURCE: Inst. Microbiol. Virol., Kiev, USSR
SOURCE: Mikrobiologicheskii Zhurnal (1978-1993) (1990), 52(2), 9-14
CODEN: MZHUX; ISSN: 0201-8462
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The enzymic activity (amylase, protease, **lipase**, pectolytic and cellulase) was studied in 5 strains of aerobic spore-forming bacteria (**Bacillus subtilis**, *B. licheniformis*, *B. coagulans*, *B. pumilus*, *B. badius*) being of interest for creation of medical and prophylactic biopreparations. The above-mentioned enzymes were found in some studied strains. This may provide participation of **bacilli** in the degrdn. processes of a no. of substrates in the digestive tract of humans and animals and is an advantage of prepns. from the genus **Bacillus** as compared with available biopreparations of other microbial cultures for prophylaxis and treatment of gastrointestinal diseases.

L47 ANSWER 28 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:53934 CAPLUS
DOCUMENT NUMBER: 112:53934
TITLE: Bacteria involved in the deterioration of Nigerian palm oil under storage
AUTHOR(S): Odunfa, S. A.
CORPORATE SOURCE: Dep. Bot. Microbiol., Univ. Ibadan, Ibadan, Nigeria
SOURCE: International Biodeterioration (1989), 25(6), 393-405
CODEN: INBIEA; ISSN: 0265-3036
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The percentage of lipolytic bacterial colonies in samples of good-grade palm oil varied from 0 to 26%, while in the deteriorated oil it was 52-73%. The organisms isolated and their percentage frequencies were: **Bacillus subtilis**, 43%; *B. pumilus*, 31%; *B. laterosporus* 14%; *B. megaterium*, 6%; and *B. brevis* 6%. *B. subtilis* and *B. pumilus* were the only species with pronounced lipolytic activities. Over the range 25-40.degree., temp. had a profound effect on the lipolytic activities of these 2 species. The deterioration of the palm oil was ascribed to improper processing which leaves traces of water in the oil and also to postprocessing contamination from the use of previously used containers and from unhygienic handling during transport and marketing.

L47 ANSWER 29 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:420674 CAPLUS
DOCUMENT NUMBER: 107:20674
TITLE: Viable microorganism detection by induced fluorescence
INVENTOR(S): Snyder, A. Peter; Greenberg, David B.; Scarpino, Pasquale V.
PATENT ASSIGNEE(S): University of Cincinnati, USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8605206	A1	19860912	WO 1986-US375	19860224
W: JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
EP 215066	A1	19870325	EP 1986-901682	19860224
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
PRIORITY APPLN. INFO.:			US 1985-706160	19850227
AB	<p>Rapid detection and identification of viable microorganisms is performed by reaction of their extracellular enzymes with a nonfluorescent dye to produce a fluorescent product. By exposing the same microbial sample to a no. of different nonfluorescent dyes, a pattern of fluorescence induction emerges. Comparison to std. microorganism fluorescence responses by pattern recognition anal. is used for organism identification. The concn. of microorganisms is estd. from the rate of fluorescence generation. Substrates used in tests on suspensions of various microorganisms were:</p> <p>(a) diacetylfluorescein, indoxy1 acetate derivs., and .beta.-naphthylacetate as probes for lipase/esterase, (b) 4-methylumbelliferyl and 3-indoxylphosphate as probes for phosphatase, (c) 4-methylumbelliferyl-.beta.-D-galactoside as a probe for .beta.-D-galactosidase, and (d) indoxy1-.beta.-D-glucoside, 4-methylumbelliferyl-.beta.-D-glucoside, and 6-bromo-2-naphthyl-.beta.-D-glucoside as probes for .beta.-D-glucosidase.</p>			

L47 ANSWER 30 OF 32 MEDLINE on STN DUPLICATE 12

ACCESSION NUMBER: 82097228 MEDLINE

DOCUMENT NUMBER: 82097228 PubMed ID: 7033138

TITLE: **Bacillus pumilus** in the induction of clindamycin-associated enterocolitis in guinea pigs.

AUTHOR: Brophy P F; Knoop F C

CONTRACT NUMBER: RR05390 (NCRR)

SOURCE: INFECTION AND IMMUNITY, (1982 Jan) 35 (1) 289-95.
Journal code: 0246127. ISSN: 0019-9567.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198203

ENTRY DATE: Entered STN: 19900317
Last Updated on STN: 19970203
Entered Medline: 19820322

AB Antibiotic-associated enterocolitis was induced in guinea pigs by the intraperitoneal injection of clindamycin. The colonic and cecal mucosa and feces of acutely ill animals were cultured under aerobic and anaerobic conditions on 5% sheep blood agar plates and on a selective and differential medium for Clostridium difficile. All morphologically distinct colony types were isolated in pure culture and identified. A sterile cell-free filtrate of each isolate was tested for ability to induce morphological changes in cultured monolayers of mouse adrenal cells. The filtrate of a predominant isolate, **Bacillus pumilus**, induced an alteration of cellular morphology; the sterile filtrate of other isolates were unreactive. Toxin contained in cell-free filtrates of **B. pumilus** caused a syndrome identical to clindamycin-associated enterocolitis when injected intracecally into guinea pigs. The toxin had a molecular weight of 6,500 daltons as determined by molecular sieve chromatography and was inactivated with pronase, **lipase**, and trypsin. The minimal inhibitory concentrations of clindamycin and vancomycin for **B. pumilus** were 50 micrograms/ml and less than or equal to 0.4 micrograms/ml, respectively.

L47 ANSWER 31 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1981:188319 CAPLUS

DOCUMENT NUMBER: 94:188319

TITLE: Lipolytic activity of **Bacillus pumilus**

AUTHOR(S): Mourey, A.

CORPORATE SOURCE: Lab. Bot. Microbiol., Fac. Sci., Nancy, 54037, Fr.

SOURCE: Revue Francaise des Corps Gras (1981), 28(2), 55-8

DOCUMENT TYPE: CODEN: RFCGAE; ISSN: 0035-3000
Journal

LANGUAGE: French

AB Lipolytic activity is localized in the cells of *B. pumilus* during all phases of the growth curve. Treatment of the cells with lysozyme without sucrose is more effective in releasing these lipolytic enzymes than treatment with lysozyme plus sucrose, sonication, or grinding with glass beads. Lipolytic enzymes are more readily released from 109-phase cells than stationary-phase cells.

L47 ANSWER 32 OF 32 MEDLINE on STN DUPLICATE 13

ACCESSION NUMBER: 79017402 MEDLINE

DOCUMENT NUMBER: 79017402 PubMed ID: 696046

TITLE: Sensitivity to lytic agents and DNA base composition of several aerobic spore-bearing **bacilli**.

AUTHOR: Candeli A; Mastrandrea V; Cenci G; De Bartolomeo A

SOURCE: ZENTRALBLATT FUR BAKTERIOLOGIE, PARASITENKUNDE, INFektionsKRANKHEITEN UND HYGIENE. ZWEITE NATURWISSENSCHAFTLICHE ABTEILUNG: MIKROBIOLOGIE DER LANDWIRTSCHAFT DER TECHNOLOGIE UND DES UMWELTSCHUTZES, (1978) 133 (3) 250-60.

Journal code: 8000422. ISSN: 0323-6056.

PUB. COUNTRY: GERMANY, EAST: German Democratic Republic

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197811

ENTRY DATE: Entered STN: 19900314

Last Updated on STN: 19900314

Entered Medline: 19781118

AB The authors studied the possible relationship between a genetic characteristic, like DNA base composition, and certain phenotypic characteristics, i.e., sensitivity to lytic agents, morphology of colonies, and biochemical reactions in 34 strains of spore-bearing **bacilli**. From the results obtained two groups of **bacilli** have been identified. The first group includes the species *B. subtilis*, *B. pumilus*, *B. licheniformis*, and *B. firmus* and one strain of *B. megaterium*. The mean value of the GC% of the DNA is 44.22 +/- 1.76. All the strains examined are highly sensitive to lysozyme and resistant to sodium lauryl sulphate (S.L.S.); the surface colonies have a "rhizoid" appearance and the microcolonies on slide microculture are star-shaped. The second group includes the species *B. cereus*, *B. cereus* var. *mycoides*, *B. anthracis*, and *B. thuringiensis*. The mean value of the GC% of the DNA is 33.65 +/- 0.59. All the strains belonging to this group are resistant to both lysozyme and S.L.S., and the surface macro-colonies and the microcolonies have a "medusae head" appearance. The two groups also have certain different biochemical reactions; e.g., anaerobic growth and the egg yolk reaction, with few exception, are negative for the first group and positive for the second; furthermore, the strains in the first group (with rare exceptions) cause fermentation in the three carbohydrates, glucose, arabinose, and xylose, while glucose only is fermented by all strains with one exception in the second group. The position of *B. megaterium* is not yet clear, although one strain may certainly be included in the first group. Lysis by **lipase** is extremely variable and does not correlate with any of the other characteristics studied. The other species studied in relation to the characteristics, considered in our research (*B. coagulans*, *B. macerans*, *B. polymyxa*, *B. laterosporus*, *B. alvei*, *B. circulans*, *B. stearothermophilus*, and *B. brevis*), are not susceptible to grouping, either in the first, or in the second or even in a separate group.

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